# USER MANUAL

## X7868r

Wireless ADSL Router

VERSION 2.0

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# Table of Contents

## CHAPTER 1 – GETTING STARTED

I OVERVIEW ..... 5
II FEATURES ..... 6
III PACKAGING ..... 7
IV SAFETY GUIDELINES ..... 9
V APPEARANCE ..... 10
VI HARDWARE INSTALLATION ..... 12
VII MANAGEMENT ..... 13
VIII DEFAULT VALUES ..... 14
IX SOFTWARE UPGRADE ..... 15

## CHAPTER 2 – COMMAND LINE INTERFACE

1. MAIN MENU COMMANDS ..... 18
2. LAN MENU COMMANDS ..... 19

## CHAPTER 3 – WEB MANAGEMENT INTERFACE

I OVERVIEW ..... 31
II PREPARATION ..... 31
1. LOGIN ..... 32
1.0 System
1.1 Users……..34
1.2 Event Log……..34
1.3 One-click Update……..35

1.4 Remote Access……..35
1.5 Firmware Update……..36
1.6 Backup/Restore…….36
1.7 Restart Router……37
2.0 Configuration…….38
2.1 Save config…….38
2.2 LAN connections……...38
2.3 EMUX connections……47
2.4 Portpvc connections……..…….49
2.5 WAN connections……..……50
2.6 Security……..……91
2.7 802.1x…….…….…….104
2.8 WPA……..…….……..106
2.9 Routing Table……..…….……107
2.10 DHCP server……..…….……...108
2.11 DNS client…….……113
2.12 DNS relay…….……..114
2.13 SNTP client……118
2.14 IGMP Proxy……...…119
2.15 Wireless Mac Filter……120
2.16 RADIUS Client……..……120
2.17.0 Ports
2.17.1 Adsl…….122
2.17.2 Switch Ether……124
2.17.3 Wireless……...124

# Chapter 1

# Getting Started

## I Overview

The ***X7868r/X7868r+*** is a multi-mode ADSL/ADSL2/ADSL2+ router that complies with ANSI T1.413 Issue 2, ITU G.992.1 (X7868r/X7868r+), ITU G.992.2, G.992.3, G.992.4, G.994.5 (X7868r+ only), and ***X7868r+*** supports ADSL2+ as well. The ***X7868r/X7868r+*** provides a 10/100BaseTX Ethernet interface on the DTE side. The broadband line interface supports ADSL Annex A. The X7868***r/X7868r+*** delivers broadband Internet access for enterprises, telecommuters, home, and remote office workers with high-speed data transmission requirements. It supports multiple protocols such as PPP (RFC 2364), IP (RFC 2225/RFC 1577), and RFC 1483 over ATM over ADSL, and PPP (RFC 2516) over Ethernet. X7868***r/X7868r+*** offers convenient configuration and management locally by telnet, SNMP, and a Web-browser through the Ethernet interface, and remotely through the ADSL interface.

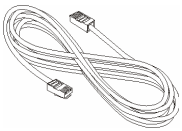
# II Features

- ✓ High Speed Asymmetrical Data Transmission on Twisted Copper Pair Wire
- ✓ Service providers can deploy ADSL rapidly over existing wire infrastructure (POTS or ISDN line)
- ✓ Interchangeable between Bridge and Router mode
- ✓ RFC 1483 Bridge and Routing over ATM over ADSL
- ✓ PPPoE, and IPoA, and PPPoA Routing over ADSL
- ✓ Built-in four-port 10/100BaseTX Ethernet switch for PC or LAN connection
- ✓ 802.11b/g WLAN supports up to 54Mbps
- ✓ Allow/Deny Wireless MAC address list
- ✓ WEP and TKIP Cipher suits are supported:
- ✓ 64, 128, 256 bit WEP key lengths are supported:
- ✓ Supports Wi-Fi WPA
- ✓ High quality, simple operation, and low power consumption
- ✓ Compatible and interoperable with most central office side ADSL DSLAM or Multi-service Access Systems
- ✓ Configuration and management with Telnet through the Ethernet interface, and remote Telnet through ADSL interface
- ✓ Firmware upgradeable through TFTP, HTTP
- ✓ Interoperability complies with TR-48

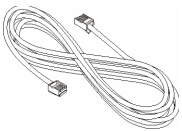
# III Packaging

This package consists of the following items:

***X7868r/X7868r+*** ADSL device unit



RJ-45 Cable



RJ-11 Cable

AC Adapter

User's Manual CD

# IV Safety Guidelines

In order to reduce the risk of fire, electric shock and injury, please adhere to the following safety guidelines.

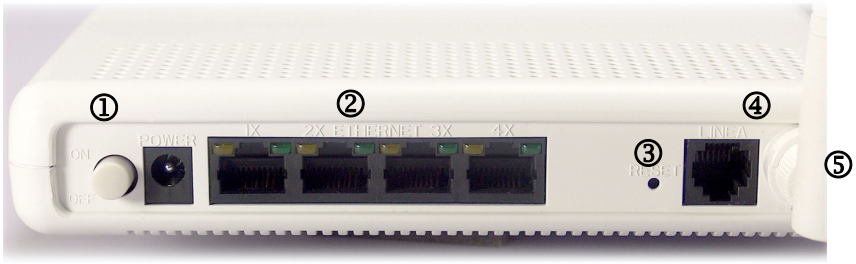
- ✓ Carefully follow the instructions in this manual; also follow all instruction labels on this device.
- ✓ Except for the power adapter supplied, this device should not be connected to any other adapters.
- ✓ Do not spill liquid of any kind on this device.
- ✓ Do not place the unit on an unstable stand or table. This unit may drop and become damaged.
- ✓ Do not expose this unit to direct sunlight.
- ✓ Do not place any hot devices close to this unit, as they may degrade or cause damage to the unit.
- ✓ Do not place any heavy objects on top of this unit.
- ✓ Do not use liquid cleaners or aerosol cleaners. Use a soft dry cloth for cleaning.

# V Appearance

**Front Panel**

| | Label | LED Status | Color | Description |
|---|---|---|---|---|
| ① | Ethernet | ON | Green | Ethernet transmitting. |
| ② | WLAN | Blinking | Green | WLAN transmitting. |
| | | ON | Green | WLAN port is active |
| ③ | Encendido | ON | Green | Power supply is connected. |
| ④ | ADSL | Blinking | Green | Training with DSLAM. |
| | | ON | Green | ADSL link is ready. |
| ⑤ | Alarma | Blinking | RED | Device Booting up. The LED will turn-off after boot-up |

## Rear Panel



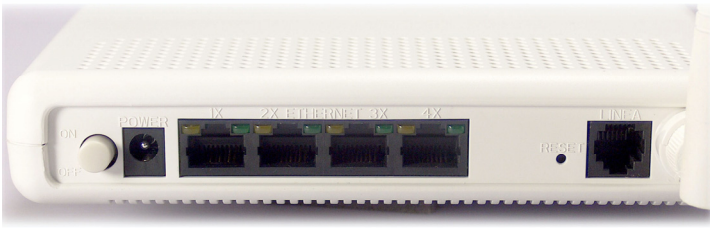

| | Label | Description |
|---|---|---|
| ① | POWER | Power jack; connect to a power adapter. |
| ② | ETHERNET | RJ-45 ports; connect to a PC or LAN. |
| ③ | RESET | Reset the modem back to factory settings by holding down on this button. |
| ④ | LINEA | RJ-11 port; connect to the ADSL outlet. |
| ⑤ | Aerial | External Dipole Antenna |

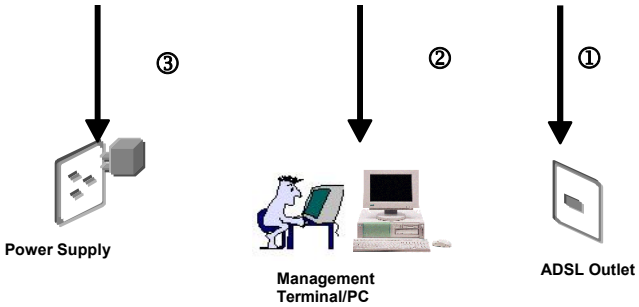
# VI Hardware Installation

1. Connect one end of the ADSL cable to the WAN port of ***X7868r/X7868r+*** and the other end to the ADSL wall outlet.

2. Using an RJ-45 cable, connect one end to the Ethernet port of ***X7868r/X7868r+*** and the other end to the LAN or a PC with an Ethernet adapter installed.

3. Plug the AC adapter into the AC power socket, and then connect the DC jack to the PWR inlet of ***X7868r/X7868r+*.**



# VII Management

- ✓ **Local Ethernet Port (telnet)** – connect the Ethernet port to your local area network or directly to a PC, "Telnet" ***X7868r/X7868r+*** from any workstation in the LAN. The default local Ethernet IP address is "192.168.1.1". See Chapter 2, Command Line Interface, for more details.
- ✓ **Local Ethernet Port (web-browser)** – connect the Ethernet port to your local area network or directly to a PC. Launch your web browser and enter default local Ethernet IP address "192.168.1.1" into the address bar.
- ✓ **ADSL Port from Remote Site** – while the ADSL connection is in service, you may remotely "Telnet" ***X7868r/X7868r+*** from a workstation connected to the CO equipment.

**Note**: As operating an ADSL device requires technical know-how and experience, it is recommended that only qualified technical staff manage ***X7868r/X7868r+***. Therefore, a password authentication is required when you enter the command line and Web interface. See the *Default Values* section to obtain the password.

# VIII Default Values

***X7868r/X7868r+*** is pre-configured with the following parameters; you may also re-load the default parameters by pressing the reset button of the modem for about 10 seconds or by using the **System Commands** link in the Web interface.

**Username/Password**: admin

| | |
|---|---|
| **Default IP Address** | **WAN and ADSL** |
| Ethernet (local) IP: 192.168.1.1 | Local Line Code: Multi Mode |
| Subnet mask: 255.255.255.0 | **DHCP Server:** Enable |
| **Protocol** | 192.168.1.2~192.168.1.22 |
| RFC1483 Bridge: VPI/VCI: 8/35 | **DNS Relay:** Disable |
| Class (QoS): UBR | |

**Note:** The Username and Password are case-sensitive.

# IX Software Upgrade

You may easily upgrade ***X7868r/X7868r+*** embedded software by obtaining the compressed upgrade kit from the service provider and then following the steps for upgrading through either a DOS prompt or a Web-browser:

***Software upgrade through a DOS prompt***

Step 1. Extract the ZIP file for updated firmware.

Step 2. Connect ***X7868r/X7868r+*** via the local Ethernet port or remote ADSL link, making sure that the ***X7868r/X7868r+*** Ethernet IP address and your terminal are properly configured so that you can successfully "*ping*" ***X7868r/X7868r+***. The default local IP address is "192.168.1.1".

Step 3. Under the DOS prompt, execute the command "xupgrade <*IP address of* ***X7868r/X7868r+*** >", for instance, "xupgrade 192.168.1.1".

Step 4. This upgrading process may last as long as 60 seconds.

Step 5. Reboot ***X7868r/X7868r+*** with new software.

**Note**: Strictly maintain stable power to ***X7868r/X7868r+*** while upgrading its software. If the power fails during the upgrading process, contents in the memory could be destroyed, and the system may hang. In such a case, you must call the dealer or system integrator for repairs.

***Software upgrade through a Web-browser***

Step 1. Extract the ZIP file for updated firmware.

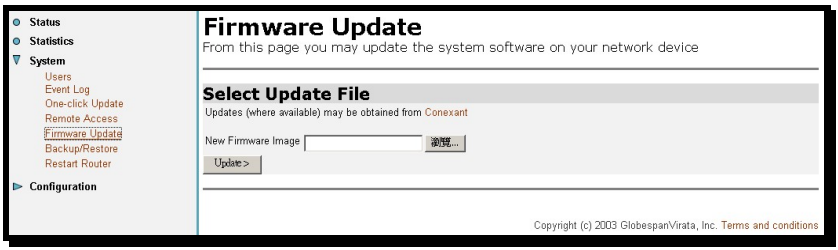
Step 2. Connect ***X7868r/X7868r+*** via the local Ethernet port or remote ADSL link, making sure that the ***X7868r/X7868r+*** Ethernet IP address and your terminal are properly configured so that you can successfully "*ping*" ***X7868r/X7868r+***. The default local IP address is "192.168.1.1".

Step 3. Launch the Web browser (IE or Netscape), and enter the default IP address 192.168.1.1 into the address bar to access the Web management page.

Step 4. Click on the **Maintenance** link in the navigation bar and then on the **Modem Upgrade** link below it.

Step 5. Click on the **Browse** button to select the upgrade file.

Step 6. Click on the **Update** button when completed.




**Note**: Strictly maintain stable power to ***X7868r/X7868r+*** while upgrading its software. If the power fails during the upgrading process, contents in the memory could be destroyed, and the system may hang. In such a case, you must call the dealer or system integrator for repairs.

# Chapter 2

# Command Line Interface

## Setup

**1. Start "Hyper-terminal" program**

On Windows 98 or Windows NT:

Click on the **Start** button → **Programs** → **Accessories** → **Hyper Terminal Group** → Double Click **"Hypertrm.exe"** → Enter a Connection Name → Select Icon → Click **OK**

**2. Select a port to communicate with *X7868r/X7868r+***

Choose **TCP/IP** and click **OK**

**3. Set Connection Properties**

**Connect To:**
Host address: 192.168.1.1
Port number: (Choose the port corresponding to the hardware connection)
Connect using: TCP/IP (Winsock)

**Settings:**
Function, arrow, and ctrl keys act as: Windows keys
Backspace key sends: Delete
Emulation: Auto-detect
Telnet terminal: ANSI
Back-scroll buffer lines: 500

**ASCII Setup:**
Echo typed characters locally: enable
Line delay: 0 milliseconds
Append line feeds incoming line ends: enable
Wrap lines that exceed terminal width: enable

# CLI Commands

## 1. Main Menu Commands

Type "?" following the "→" to retrieve a list of commands under the main menu to begin the configuration.

| Command | Syntax | Description / Parameters |
|---|---|---|
| System info | → display | Display current version |
| Ip list interface | → display | Displays the configuration of IP |
| Restart | → restart | Reboots the modem |
| Restore | → restore | Sets all configurations to default |
| Ping | → ping <ipAddress> [<subnetMask>] | Pings the specified IP address for testing purposes |
| Save | → save | Saves the current configuration |

**How to DISPLAY**

- Displays the IP address, subnet mask and software version.
- *Syntax*: display

```
Ip list interface

 ID   | Name     | IP Address     | DHCP    | Transport
------|----------|----------------|---------|----------
    1 | eth0     | 192.168.1.1    | disabled | <BRIDGE>
    2 | ppp-0    | 0.0.0.0        | disabled | ppp-0
    3 | ppp-1    | 0.0.0.0        | disabled | ppp-1
-------------------------------------------------------------------------
-->system info
Software ver: 1.03APF2.7868A-D.79.52.25f 1/December/2005 23:20
```

Pings a specified IP address.

- *Syntax*: ping <ipAddress>
- *Example*: ping 192.168.0.81

```
→ ping 192.168.1.1
ping: PING 192.168.1.1: 32 data bytes
ping: 40 bytes from 192.168.1.1: seq=0, ttl=128, rtt<10ms192.168.0.81
```

**RESTART**

- Restarts the modem.
- *Syntax*: restart

```
→ system config restart

Login:
```

**RESTORE**

- Sets all configurations to factory default settings.
- *Syntax*: restore

```
→ system config restore factory
Restoring factory defaults...

→
```

**SAVE**

- Saves the current configuration.
- *Syntax*: save

```
→ system config save

Saving configuration...
Configuration saved.
→
```

## 2. LAN Menu Commands

Type "lan" following the "→" to enter the LAN menu.

| Command | Syntax | Description / Parameters |
|---|---|---|
| ▸ Setip | lan→ setip <ipAddresss> [<subnet mask>] | Configures IP settings |
| ▸ Home | lan→ home | Returns to the main menu |

**SET IP**

- Configures the IP address and subnet mask of ***X7868r/X7868r+***.
- *Syntax*:
- ip set interface <interface> ipaddress <ipaddress>[<subnet mask>]
- *Example*:
- ip set interface eth0 ipaddress 192.168.1.1 255.255.255.0

**HOME**

- Returns to the main menu in console
- *Syntax*: home

```
adsl> home
```

## *List cli command and help.*

ATMOS CLI Help

---

Within the CLI, the following functions can be used:

* ***Hitting ?*** halfway through a word shows all valid completions of that prefix

* ***Hitting ?*** after a word shows a list of the words that can follow it

* ***Hitting TAB*** halfway through a word completes it, if it is unique

* The ***UP*** and ***DOWN cursor keys*** move back and forward through the command history

* ***LEFT*** and ***RIGHT cursor keys*** can be used for line-editing, and ***CTRL+A*** and ***CTRL+E*** move the cursor to the start and end of the line respectively

***Pressing ? at the top-level prompt*** will display a list of the command groups available. ***Typing one followed by a space and then hitting ?*** will show the subcommands within that group, and so on.

802.1x 802.1x port based authentication

802.1x authenticator 802.1x authenticator settings

acl snmp remote management

acl add write management ipaddr

acl delete delete management ipaddr

acl disable disable acl fuction

acl enable enable acl fuction

acl list list management ipaddr

agent Get a file from a remote host

agent get Get a file from a remote host

agent methods

ald Configuration commands for ald

ald add Adds an ald profile

ald clear Clear all ald profiles

ald delete Deletes an ald profile

ald list List ald profiles

ald show Show an ald profile

bridge Configure layer 2 bridge

bridge add Add an interface/unicast entry/egress interface.

bridge attach Attach an interface to a transport.

bridge clear Clear interfaces/unicast entries/egress interfaces.

bridge delete Delete an interface/unicast entry/egress interface.

bridge detach Detach an interface from the transport it is attached to.

bridge flush Flush all the dynamic entries for an interface.

bridge list List interfaces/unicast entries/egress interfaces.

bridge set Set Bridge/Interface level parameters.

bridge show Show an interface/unicast entry/egress interface.

classifier Packet classifier configuration commands

classifier add Add a new classifier profile

classifier clear Clear all classifier profiles

classifier delete Delete a classifier profile

classifier list List all classifier profiles

classifier profile Commands to edit rules in the specified profile

classifier show Show all rules in the specified profile

console Console access

console enable Enter console mode

console process Execute console command

dhcpclient DHCP client configuration commands

dhcpclient add ..... If you want informations, please press "Tab" key.

dhcpclient clear .....

dhcpclient delete .....

dhcpclient interfaceconfig .....

dhcpclient list .....

dhcpclient set .....

dhcpclient show .....

dhcpclient update .....

dhcpserver DHCP server configuration commands

dhcpserver add ..... If you want informations, please press "Tab" key.

dhcpserver clear .....

dhcpserver delete .....

dhcpserver disable .....

dhcpserver enable .....

dhcpserver forcerenew .....

dhcpserver list .....

dhcpserver set .....

dhcpserver show .....

dhcpserver subnet .....

dhcpserver update .....

dnsclient DNS client configuration commands

| | |
|---|---|
| dnsclient add | Add search domains or DNS servers |
| dnsclient clear | Clear groups of DNS client settings |
| dnsclient delete | Remove specific client settings |
| dnsclient list | List DNS client settings |
| dnsrelay | DNS relay configuration |
| dnsrelay add | Add DNS server address |
| dnsrelay clear | Clear DNS relay table of DNS server addresses |
| dnsrelay delete | Remove single DNS server |
| dnsrelay disable | |
| dnsrelay enable | |
| dnsrelay list | List known DNS servers |
| dnsrelay set | |
| dnsrelay show | Show DNS relay state |
| emux | Ethernet Switch Multiplex configuration commands |
| emux add | Add some ... |
| emux clear | Clear some ... |
| emux del | Delete some ... |
| emux list | List some ... |
| emux set | Set some ... |
| emux version | Display version |
| ethernet | Commands to configure ethernet transports |
| ethernet add | Create ethernet transport |
| ethernet clear | Remove all ethernet transports |
| ethernet delete | Remove single ethernet transport |
| ethernet list | List ethernet ports/transports |
| ethernet set | Set port of an existing ethernet transport |
| ethernet show | Display existing ethernet transport |
| firewall | Firewall configuration commands |

firewall add ..... If you want informations, please press "Tab" key.

firewall clear .....

firewall delete .....

firewall disable .....

firewall enable .....

firewall list .....

firewall set .....

firewall show .....

firewall status .....

help Top level CLI help

igmp ..... If you want informations, please press "Tab" key.

imdebug Directly access the information model

imdebug get Display a single attribute of an object

imdebug list List children of a parent object

imdebug set Set the value of an attribute of an object

ip Configure IP router

ip add ..... If you want informations, please press "Tab" key.

ip attach .....

ip attachbridge .....

ip attachvirtual .....

ip clear .....

ip delete .....

ip detach .....

ip interface .....

ip list .....

ip ping .....

ip set .....

ip show .....

| | |
|---|---|
| ipoa | IP over ATM configuration |
| ipoa add | Add IPoA transport |
| ipoa clear | Remove all IPoA transports |
| ipoa delete | Remove single IPoA transport |
| ipoa list | ARP/transport listing |
| ipoa set | Set transport parameters |
| ipoa show | Display transport details |
| ipoa transport | Configure PVCs for specific transport |
| logger | Log to a remote host using syslog |
| logger set | Configure syslog |
| logger show | Show syslog config |
| meter | Packet metering configuration command |
| meter add | Add a profile |
| meter clear | Clear all meter profiles which are not being used |
| meter delete | Delete a profile |
| meter list | List all configured profiles |
| meter set | Set action in a profile |
| meter show | Show a profile |
| nat | NAT configuration commands |
| nat add ..... | If you want informations, please press "Tab" key. |
| nat clear ..... | |
| nat delete ..... | |
| nat disable ..... | |
| nat enable ..... | |
| nat iketranslation ..... | |
| nat list ..... | |
| nat show ..... | |
| nat status ..... | |

| | |
|---|---|
| port | Physical port configuration commands |
| port dsl | Port name |
| port ethernet | Port name |
| port list | List ports by type |
| port raw_ethernet | Port name |
| port wireless | Port name |
| port wlan_filtered | Port name |
| pppoa | PPP over ATM configuration |
| pppoa add | Create PPPoA transport |
| pppoa clear | Remove all PPPoA transports |
| pppoa delete | Remove single PPPoA transport |
| pppoa list | List existing PPPoA transports |
| pppoa set | Set existing PPPoA transport properties |
| pppoa show | Show single PPPoA transport's properties |
| pppoe | PPP over ethernet configuration |
| pppoe add ..... | If you want informations, please press "Tab" key. |
| pppoe clear ..... | |
| pppoe delete ..... | |
| pppoe list ..... | |
| pppoe off ..... | |
| pppoe on ..... | |
| pppoe set ..... | |
| pppoe show ..... | |
| radclient | RADIUS Client Configuration commands |
| radclient add | Add a server |
| radclient delete | Delete a server |
| radclient disable | Disable RADIUS client module |
| radclient enable | Enable RADIUS client module |

radclient get Display the current accounting interval

radclient list List the configuration of all the servers

radclient set Change accountng interval or the configuration of a radclient server

radclient show Show the configuration of a server

radclient status Show the current status ( true=enabled, false=disabled)

reboot reboot modem

restore_defaults set all configuration to factory setting

rfc1483 Commands to configure RFC1483 transports

rfc1483 add ..... Create a new transport

rfc1483 clear .....

rfc1483 delete .....

rfc1483 list .....

rfc1483 set .....

rfc1483 show ..... If you want informations, please press "Tab" key.

save_and_exit SAVES changes closing telnet session

save_and_reboot SAVES changes and reboots modem.

save_config Save configuration

scheduler Configuration commands for scheduler

scheduler add Adds a scheduler profile

scheduler clear Clear all scheduler profiles

scheduler delete Deletes a scheduler profile

scheduler list Lists all configured scheduler profiles

scheduler profile Sets queue attributes in scheduler profile

scheduler set Sets attributes in scheduler profile

scheduler show Show a scheduler profile

security Security configuration commands not specific to NAT or firewall

security add ..... If you want informations, please press "Tab" key.

security application .....

security clear .....

security delete .....

security disable .....

security enable .....

security list .....

security set .....

security show .....

security status .....

snmp If you want informations, please press "Tab" key.

snmp add .....

snmp delete .....

snmp list .....

snmp set .....

snmp show .....

sntpclient Simple Network Time Protocol Client commands

sntpclient add If you want informations, please press "Tab" key.

sntpclient clear

sntpclient delete

sntpclient list

sntpclient set Set existing SNTP client properties

sntpclient show Show SNTP client status and configuration

sntpclient sync Synchronize the SNTP client with external source

sntpclient source Read a file of commands

system System administration commands

system add Add a user to the system

system auto-update Update device firmware automatically from a remote server

system config Configuration file maintenance

system cpuload Show current CPU loading

system delete Remove system users

system info Display hardware/software information

system legal

system list List system information

system log Set logging options

system restart Restart system (same as pressing reset)

system set Set user privileges

system tftpc TFTP client commands

transports Transport configuration commands

transports clear ..... If you want informations, please press "Tab" key.

transports delete .....

transports list .....

transports set .....

transports show .....

upnp UPnP configuration commands

upnp disable Disable UPnP IGD

upnp enable Enable UPnP IGD

upnp set

upnp show

user User commands

user change Switch user

user logout Logout from system

user password Change current user's password

wanacl snmp remote management

wanacl add write management ipaddr

wanacl delete delete management ipaddr

wanacl list list management ipaddr

wanacl webserver Webserver configuration commands

wlanmacfilter set Wireless Mac Filter Table.

wlanmacfilter add [mac address]

wlanmacfilter delete [mac table list number]

wlanmacfilter disable wlanmacfilter disable true or false

wlanmacfilter list List Mac Filter Table

wpa Configure WPA (Wireless Protected Access)

wpa get ..... If you want informations, please press "Tab" key.

wpa set .....

You can login in this way, ***telnet 192.168.1.1 (It is LAN ip.)***

and give ***username***, ***password***.

Then you will see CLI page.

***Within the CLI, the following functions can be used:***

* Hitting ? halfway through a word shows all valid completions of that prefix

* Hitting ? after a word shows a list of the words that can follow it

* Hitting TAB halfway through a word completes it, if it is unique

* The UP and DOWN cursor keys move back and forward through the command history

* LEFT and RIGHT cursor keys can be used for line-editing, and CTRL+A and CTRL+E move the cursor to the start and end of the line respectively

Pressing ? at the top-level prompt will display a list of the command groups available. Typing one followed by a space and then hitting ? will show the subcommands within that group, and so on.

# Chapter 3

# Web Management Interface

## I Overview

The Web Management Interface is provided in order to configure ***X7868r/X7868r+*** as easily as possible. It provides a user-friendly graphical interface through a Web platform. You may configure bridge or router functions to accommodate your needs. In the section below, each configuration item is described in detail.

## II Preparation

1. Please refer to the hardware installation procedure in Chapter 1 to install ***X7868r/X7868r+***.
2. You should configure your PC to the same IP subnet as the ***X7868r/X7868r+***.
   **Example:** ***X7868r/X7868r+***: 192.168.**1.1**
   Your PC: 192.168.**1.x**
3. Connect your PC to ***X7868r/X7868r+*** and make sure that the PING function is working properly. The default IP address of this device is 192.168.1.1
4. Launch the Web browser (IE or Netscape), and enter the default IP address 192.168.1.1 into the address bar to access the Web management page.
5. The **Login** dialog box will appear first.

# 1. Login

- The **Enter Network password** window will pop up when starting the configuration. With the window active, type **admin** for both **User name** and **Password**, and then click on the **OK** button. You can also edit the username and password or add a new profile *(see section 4.3 Management for further details).*

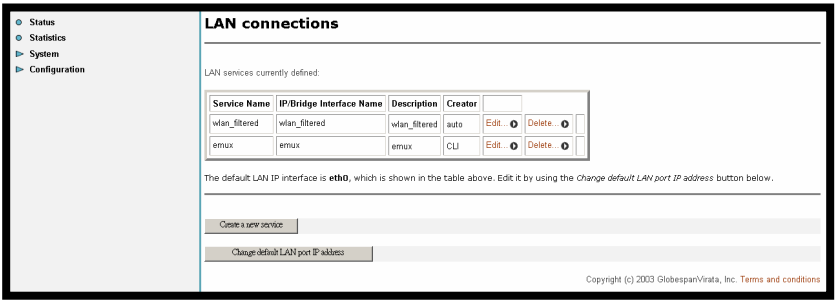
# STATUS

Show whole situations in this Status page.
This page shows the status of your connection.

LAN connections

LAN services currently defined:

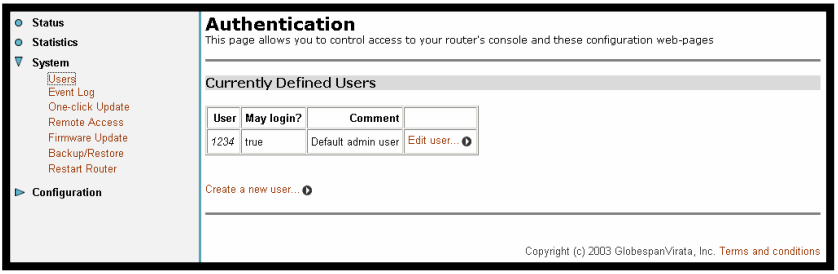
The default LAN IP interface is **eth0**, which is shown in the table above. Edit it by using the *Change default LAN port IP address* button below.




Statistics

Show all of the Statistic interfaces.

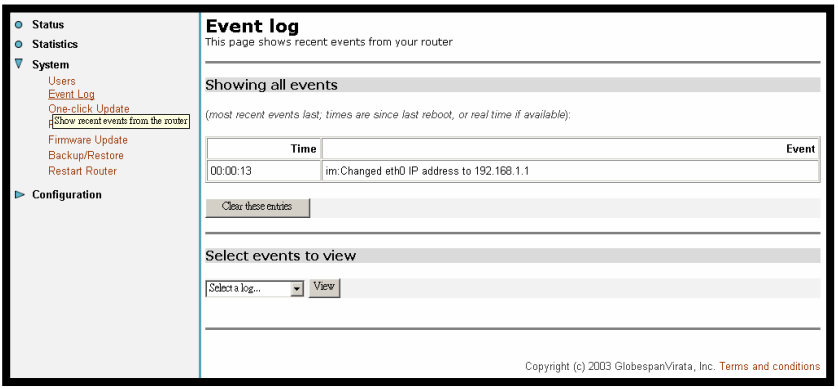
## 1.1 System Users




Authentication
This page allows you to control access to your router's console and these configuration web-pages.
So you can see Currently Defined Users or Create a new user from this page.

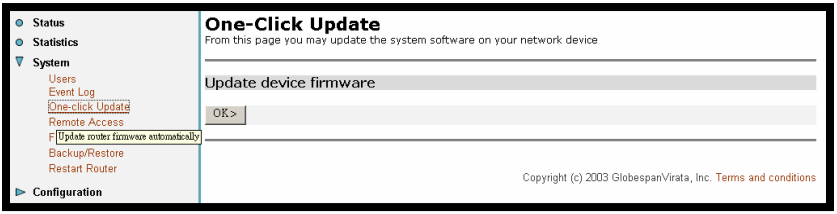
## 1.2 System/ Event Log

This page shows recent events from your router
Showing all events
(most recent events last; times are since last reboot, or real time if available):



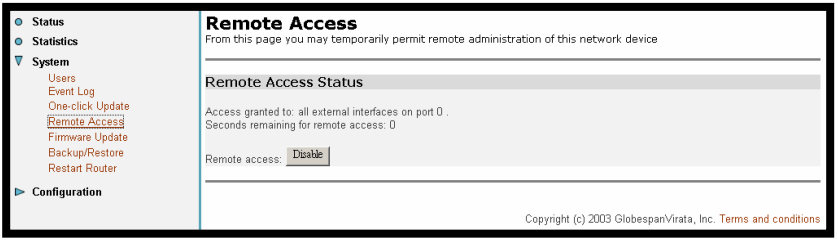
## 1.3 System One-click Update

From this page you may update the system software on your network device



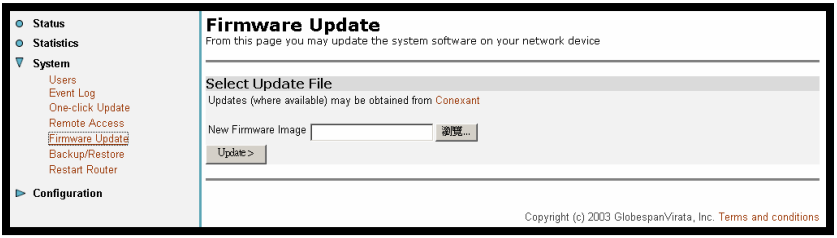

## 1.4 System Remote Access

From this page you may temporarily permit remote administration of this network device
Remote Access Status
Access granted to: all external interfaces on port 0 .
Seconds remaining for remote access: 0



## 1.5 System Firmware Update

From this page you may update the system software on your network device to choose a New Firmware Image.

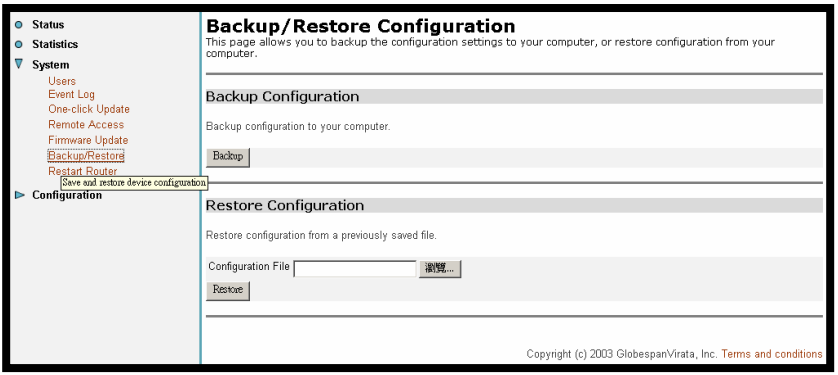



## 1.6 System Backup/Restore

This page allows you to backup the configuration settings to your computer, or restore configuration from your computer.

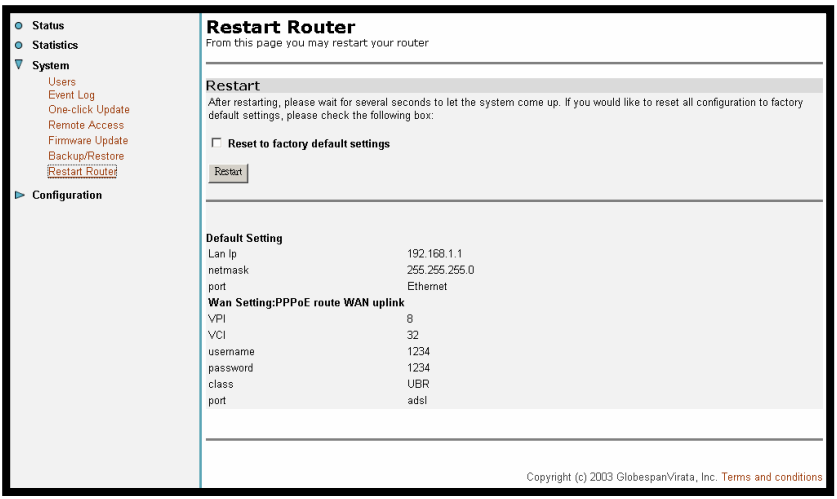
Backup configuration to your computer.

Restore configuration from a previously saved file.



## 1.7 System Restart Router

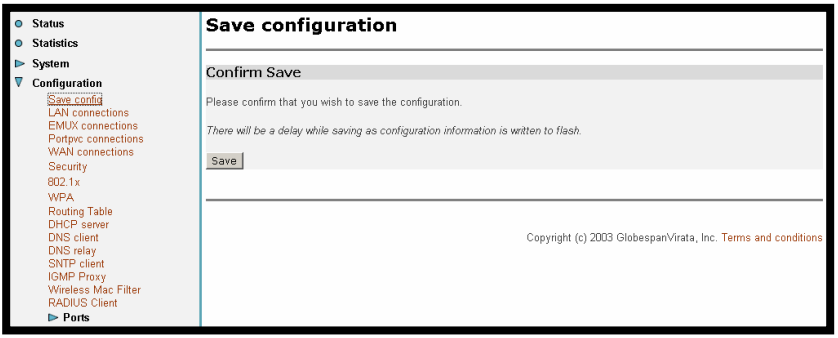
From this page you may restart your router
After restarting, please wait for several seconds to let the system come up. If you would like to reset all configuration to factory default settings, please check the following box:



# 2.0 Configuration

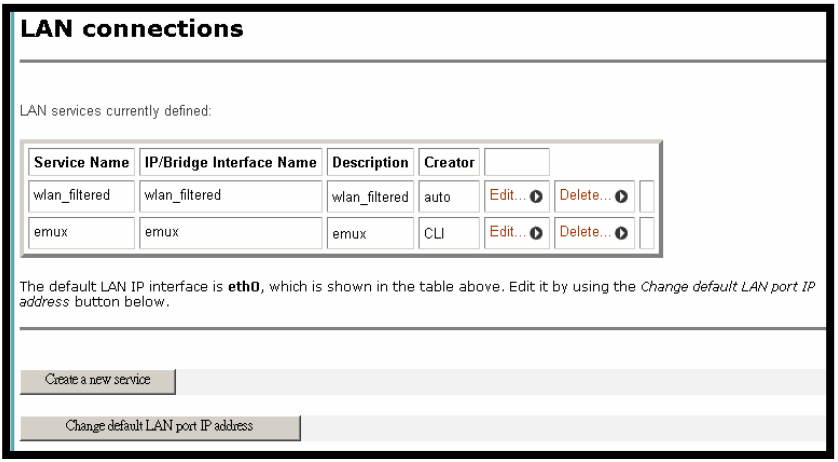
## 2.1 Configuration Save config

Confirm Save
Please confirm that you wish to save the configuration. There will be a delay while saving as configuration information is written to flash.



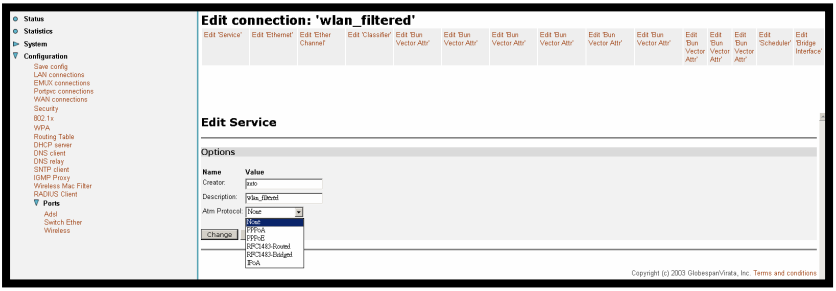

## 2.2 Configuration LAN connections

LAN services currently defined:
The default LAN IP interface is eth0, which is shown in the table above. Edit it by using the Change default LAN port IP address button below.



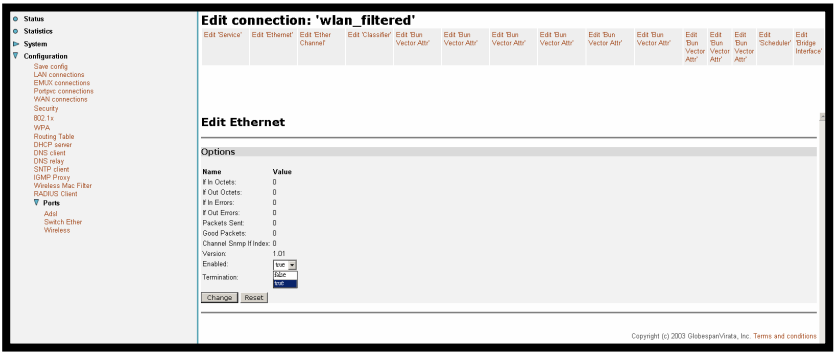
### 2.2.1.1 WLAN_filtered Edit

Edit connection: 'wlan_filtered'



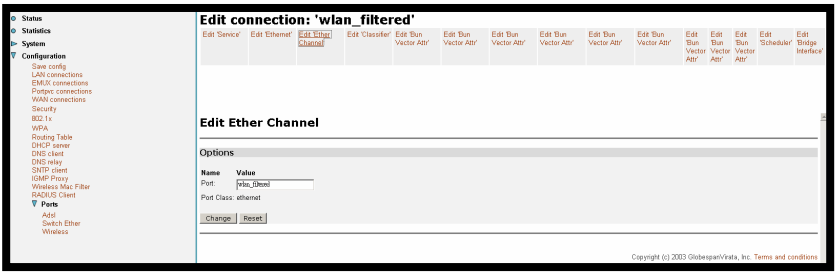

You can edit Creator, Description, Atm Protocol.
Atm Protocol: None, PPPoA, PPPoE, RFC1483-routed, RFC1483-bridge, IpoA.

### 2.2.1.2 WLAN_Edit Ethernet



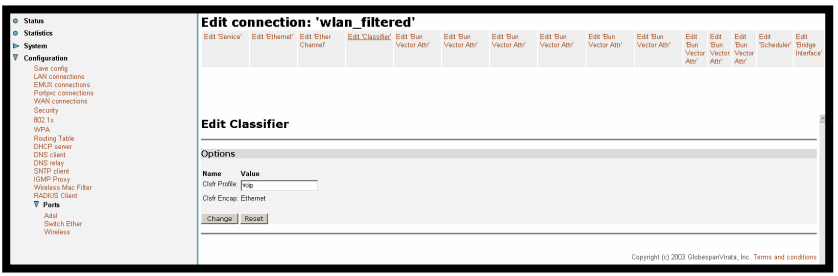

Enabled: true, false

## 2.2.1.3 WLAN_Edit Ethernet Channel



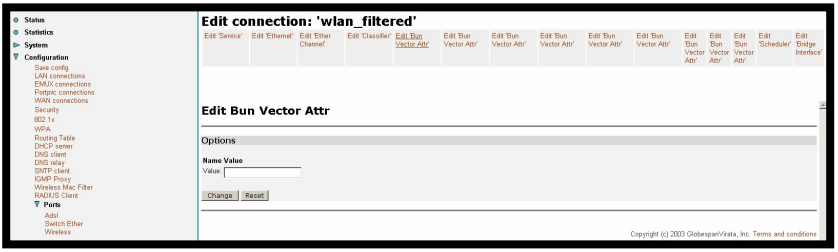

Edit Port and see Port Class.

## 2.2.1.4 WLAN_Edit Classifier



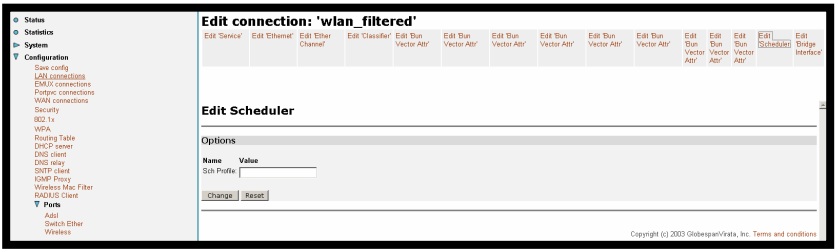

Edit Clsfr Profile and see Clsfr Encap.

## 2.2.1.5 WLAN_Edit Bun Vector Attr




Edit the Value of Bn Vector Attr.

## 2.2.1.6 WLAN_Edit Scheduler

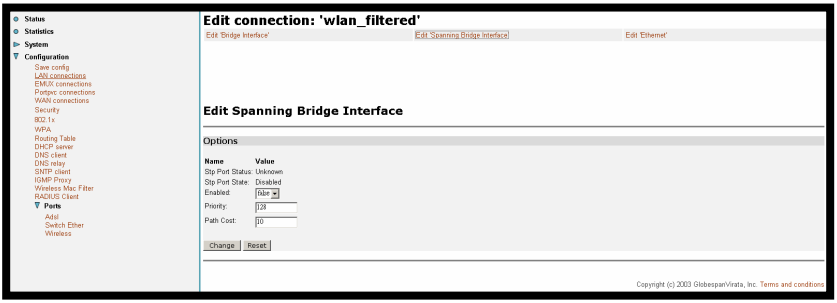



Edit the value of Scheduler Profile.

### 2.2.1.7.1 Edit Bridge Interface

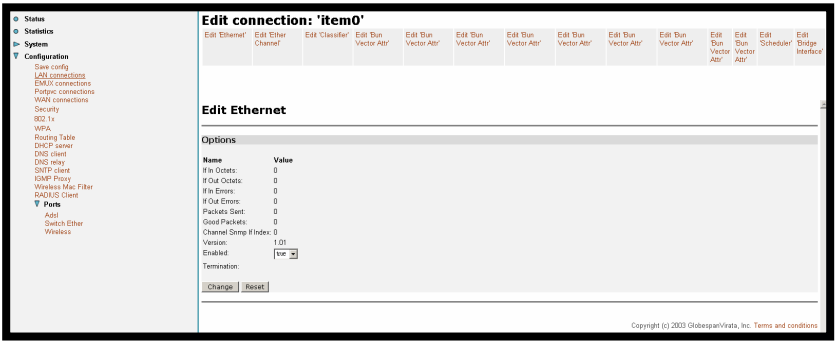
Edit Name, Ether Filter Type, Port Filter, Port Filter2, Port filter3, Eport Flag, Enabled and see Port ID, In Frames Count,, out Frames Count, Transit Delay Discards Count, Buf Overflow Discards Count.
Ethernet Filter Type: All, Ip, Pppoe, Igmp, None.
Eport Flag: false, true
Enabled: true, false

### 2.2.1.7.2 Edit Spanning Bridge Interface



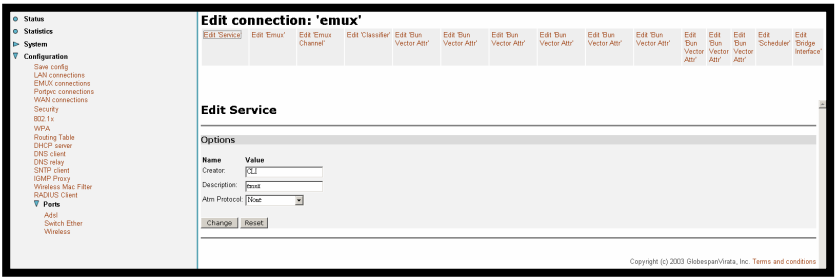

The item is the same as Edit Bridge Interface.

## 2.2.1.7.3 Edit Ethernet



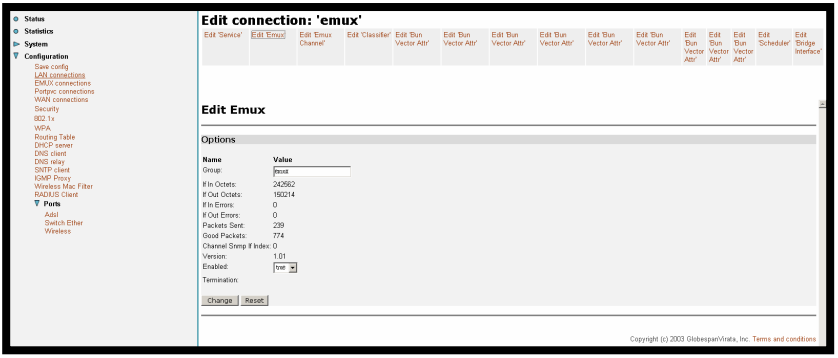

Edit Enabled and see If In Octets, If Out Octets,
If In Errors, If Out Errors, Packets Sent, Good Packets,
Channel Snmp If Index, Version, Termination.
Enabled: true, false

## 2.2.2.1 Edit Service
Edit connection:'emux'



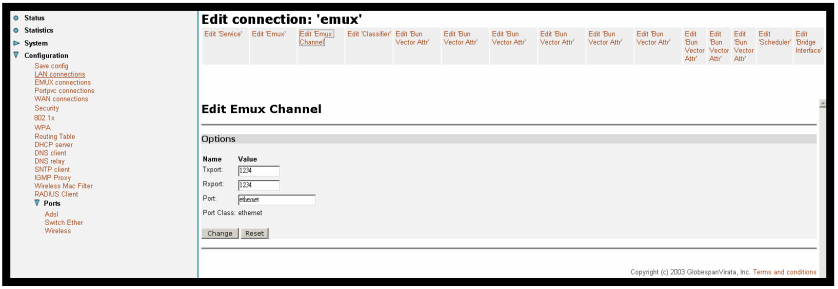

Edit Creator, Description, Atm Protocol.
Atm Protocol: None, PPPoA, PPPoE, RFC1483-routed,
RFC1483-bridge, IpoA.

## 2.2.2.2 Edit Emux



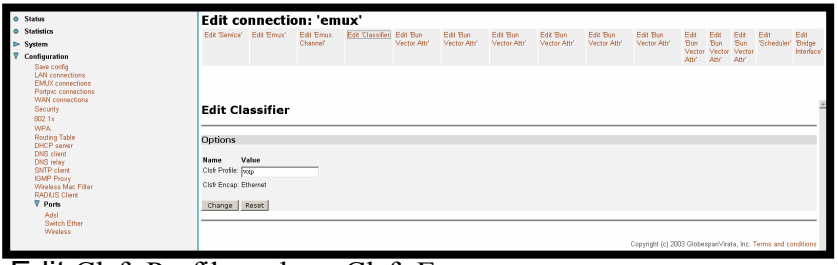

Edit Group, Enabled and see If In Octets, If Out Octets, If In Errors, If Out Errors, Packets Sent, Good Packets, Channel Snmp If Index, Version, Termination.
Enabled: true, false

## 2.2.2.3 Edit Emux Channel



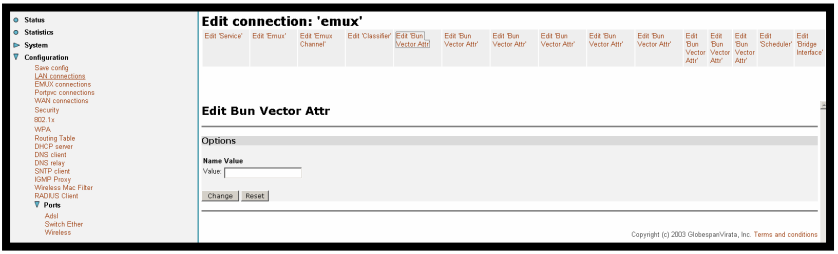

Edit Txport, Rxport, Port and see Port Class.

## 2.2.2.4 Edit Classifier



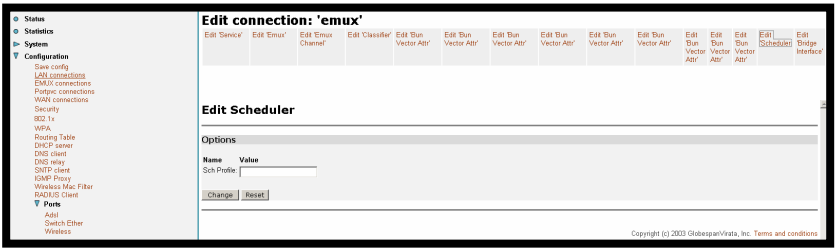

Edit Clsfr Profile and see Clsfr Encap.

## 2.2.2.5 Edit Bun Vector Attr



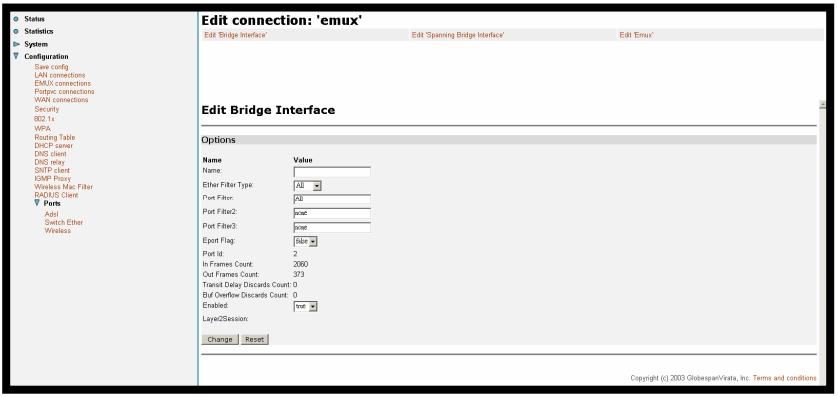

Edit the Value of Bun Vector Attr.

## 2.2.2.6 Edit Scheduler



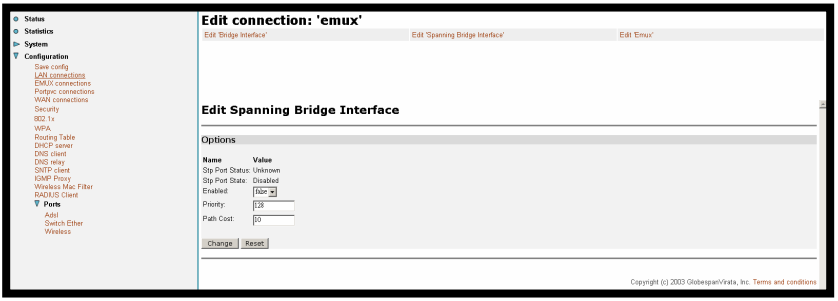

Edit the Value of Sch Profile.

## 2.2.2.7.1 Edit Bridge Interface



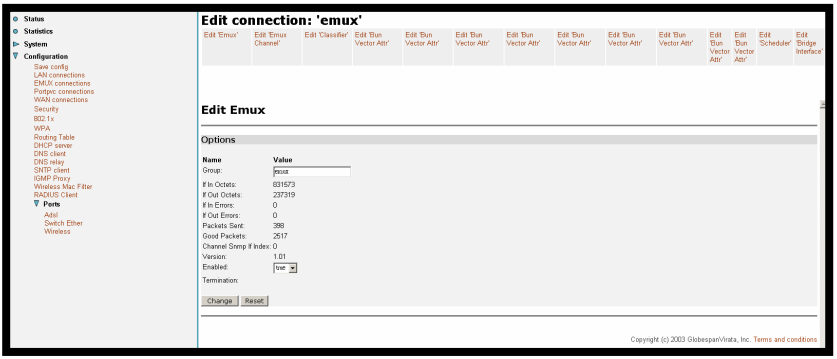

Edit Name, Ether Filter Type, Port Filter, Port Filter2, Port Filter3, Eport Flag, Enabled and see Port Id, In Frames Count, Out Frames Count, Transit Delay Discards Count, Buf Overflow Discards Count, Layer2Session.
Ether Filter Type: All, Ip, Pppoe, Igmp, None
Enabled: true, false

## 2.2.2.7.2 Edit Spanning Bridge Interface



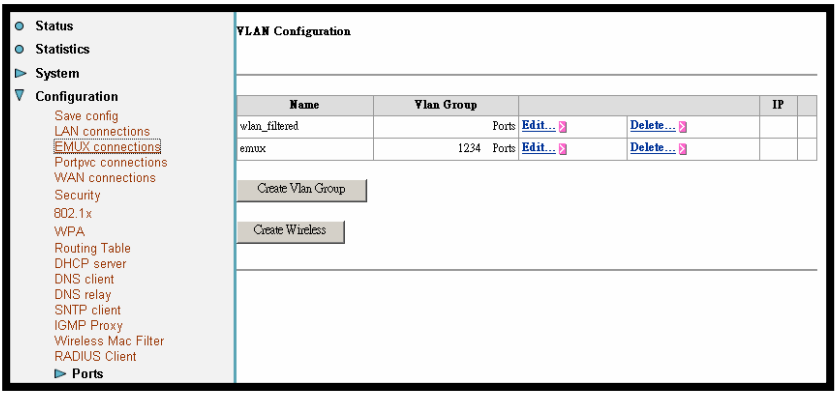

Edit Enabled, Priority, Path Cost and see Stp Port Status, Stp Port State.
Enabled: false, true

## 2.2.2.7.3 Edit Emux



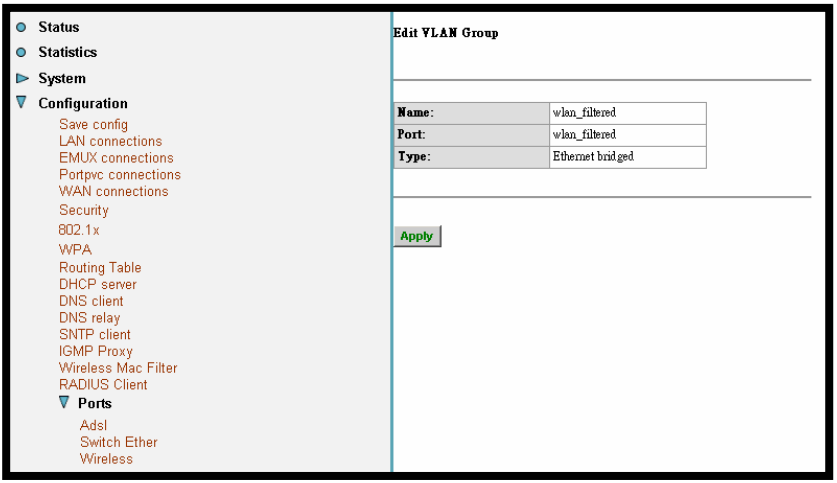

Edit Group, Enabled and see If In Octets, If Out Octets, If In Errors, If Out Errors, Packets Sent, Good Packets, Channel Snmp If Index, Version, Termination.
Enabled: true, false

## 2.3 Configuration EMUX connections




You can Create Vlan Group and Create Wireless.
Or Edit current VLAN Configuration.

## 2.3.1 WLAN_Filtered Edit VLAN Group ( Can not modify )

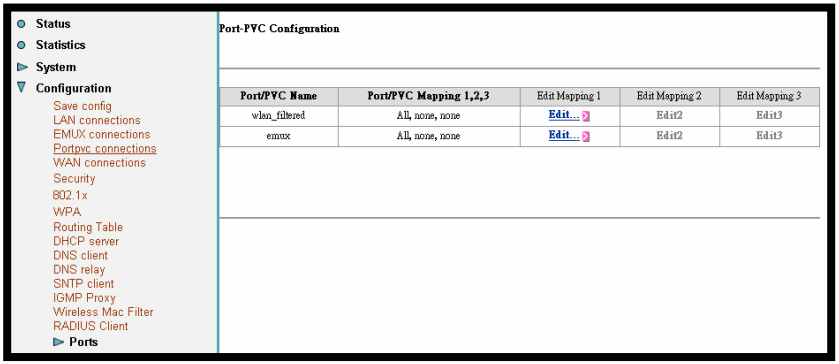



It is fixed after you creating these Groups.

## 2.3.2 EMUX Edit VLAN Group

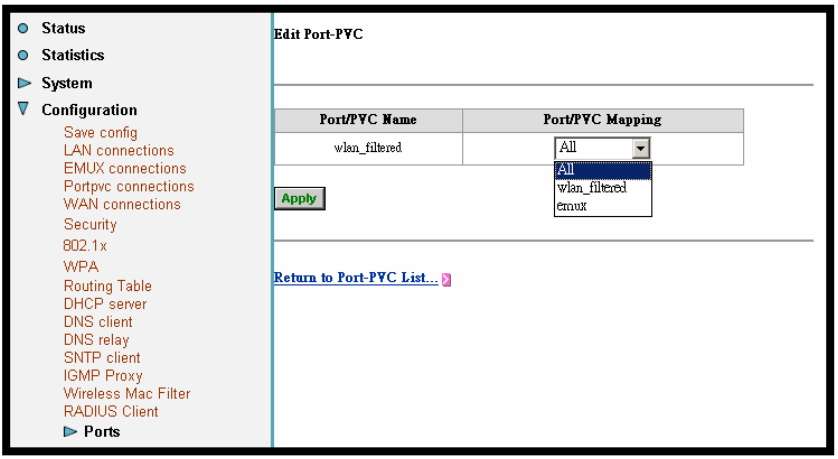
It is fixed after you creating these Groups.

## 2.4 Configuration Portpvc connections



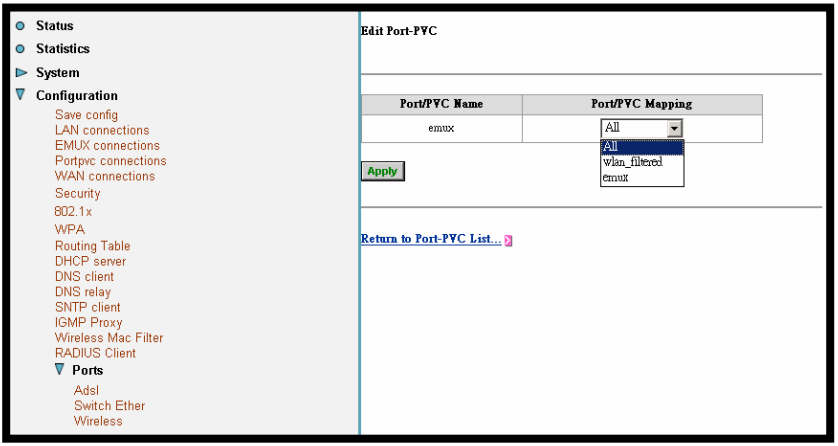

Show all of Port-PVC names.

### 2.4.1 Configuration Portpvc connections / Edit Port PVC



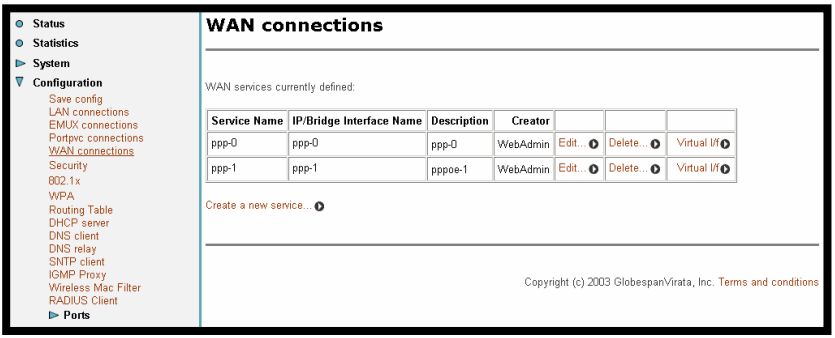

Edit wlan_filtered.
Wlan_filtered: All, wlan_filtered, emux.

## 2.4.2 Configuration Portpvc connections / Edit Port PVC




Edit emux.
emux: All, wlan_filtered, emux

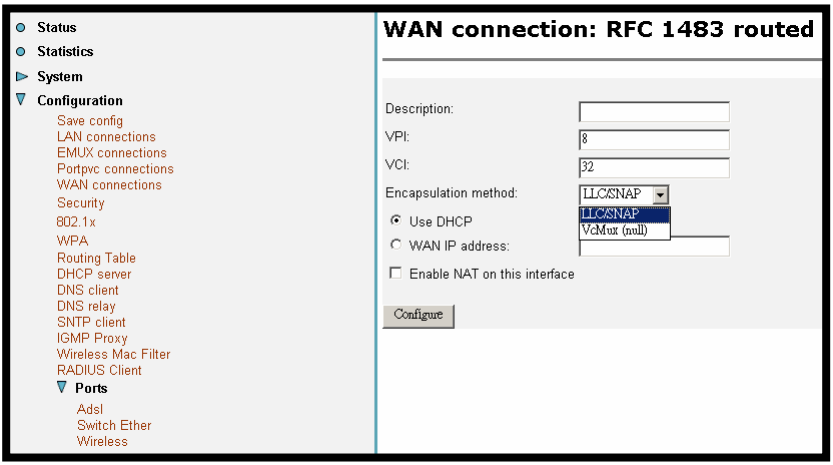
## 2.5 Configuration WAN connections




Edit WAN services currently defined.
Or Create a new service.

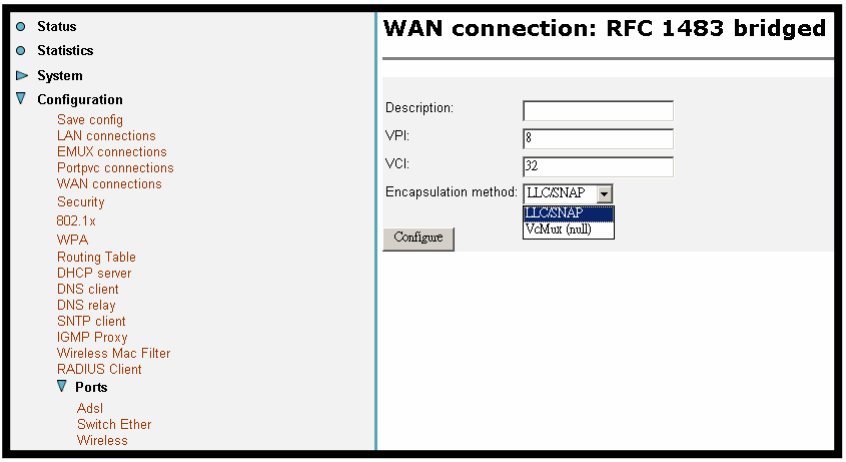
## 2.5.1 Create a new service

### 2.5.1.1 Create a new service RFC 1483 routed



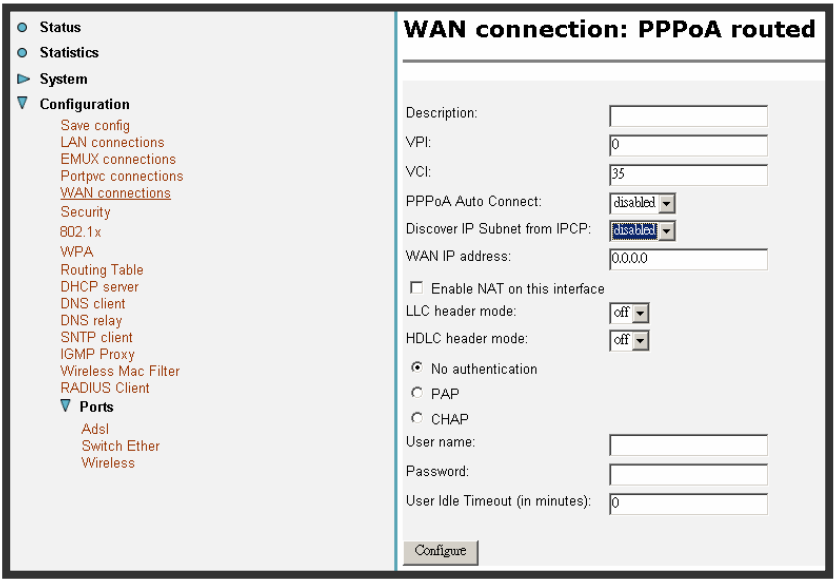

Edit Description, VPI, VCI, Encapsulation method, Use DHCP, WAN IP address, Enable NAT on this interface.
Encapsulation method: LLC/SNAP, VcMux(null)

### 2.5.1.2 Create a new service RFC 1483 bridged



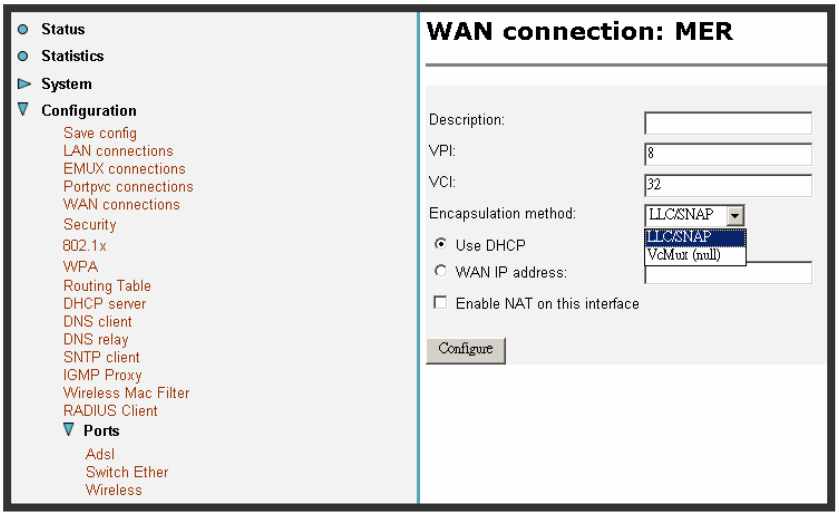

Edit Description, VPI, VCI, Encapsulation method.
Encapsulation method: LLC/SNAP, VcMux(null)

## 2.5.1.3 Create a new service PPPoA routed



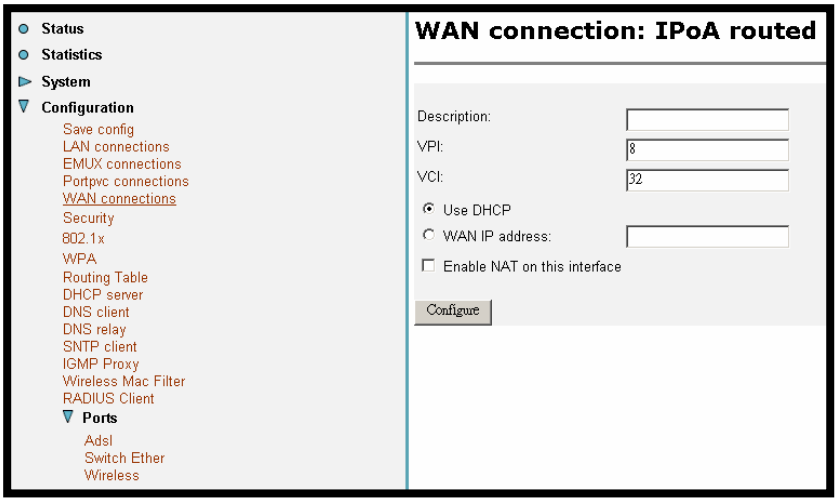

Edit Description, VPI, VCI, PPPoA Auto Connect, Discover IP Subnet from IPCP, WAN IP address, Enable NAT on this interface, LLC header mode, HDLC header mode, No authentication, PAP, CHAP, User name, Password, User Idle Timeout (in minutes).
PPPoA Auto Connect: disabled, enabled
Discover IP Subnet from IPCP: disabled, enabled
LLC header mode: off, on
HDLC header mode: off, on

### 2.5.1.4 Create a new service MER(bridge with NAT)



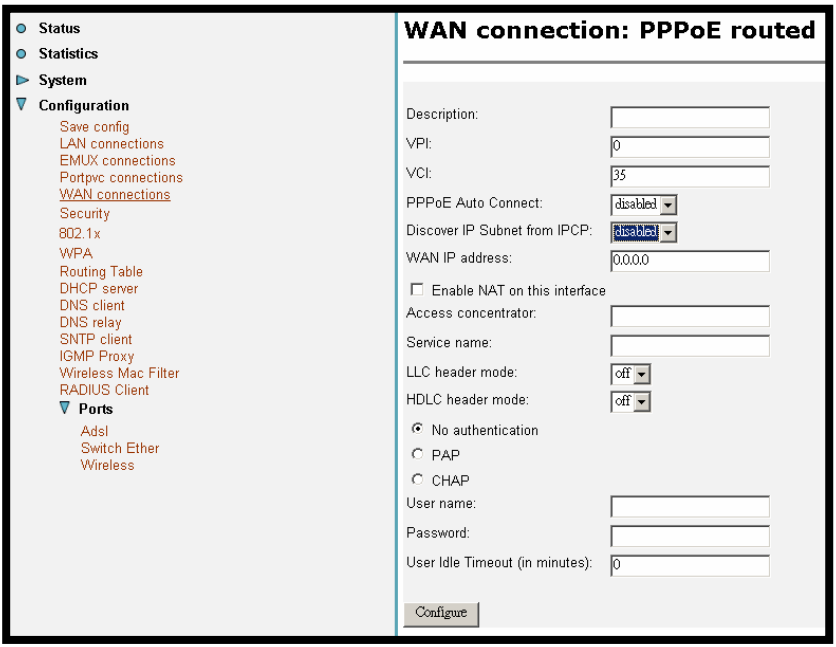

Edit Description, VPI, VCI, Encapsulation method, Use DHCP, WAN IP address, Enable NAT on this interface.
Encapsulation method: LLC/SNAP, VcMux(null)

### 2.5.1.5 Create a new service IpoA routed



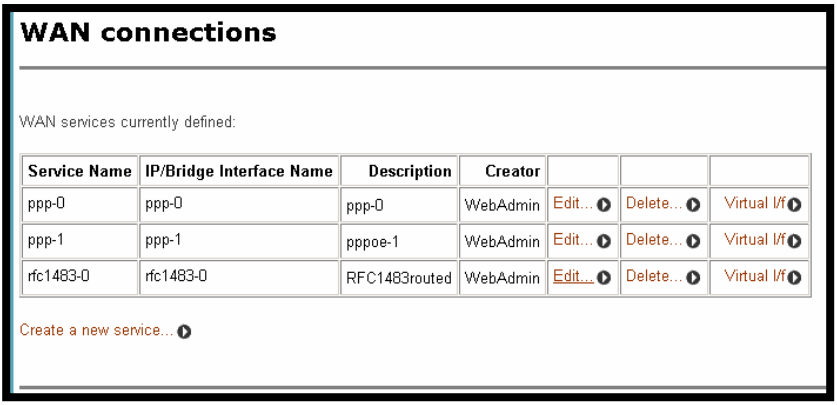

Edit Description, VPI, VCI, Encapsulation method, Use DHCP, WAN IP address, Enable NAT on this interface.

## 2.5.1.6 Create a new service PPPoE routed



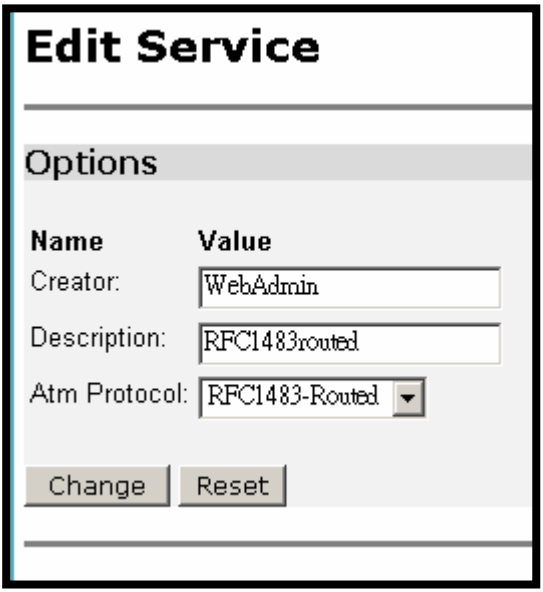

Edit Description, VPI, VCI, PPPoE Auto Connect, Discover IP Subnet from IPCP, WAN IP address, Enable NAT on this interface, Access concentrator, Access concentrator, Service name, LLC header mode, HDLC header mode, No authentication, PAP, CHAP, User name, Password, User Idle Timeout (in minutes).
PPPoE Auto Connect: disabled, enabled
Discover IP Subnet from IPCP: disabled, enabled
LLC header mode: off, on
HDLC header mode: off, on

## 2.5.2 Edit a service
### 2.5.2.1 Edit a service RFC 1483 routed



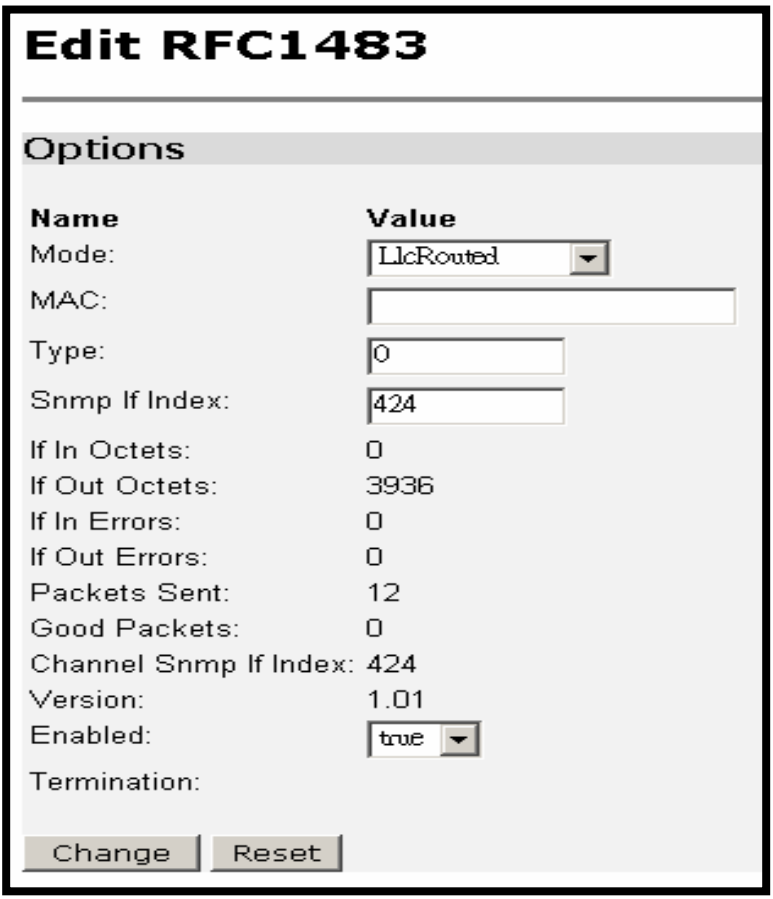

IF need, you can edit WAN services currently defined.

#### 2.5.2.1.1 Edit a service RFC 1483 routed/Edit Service



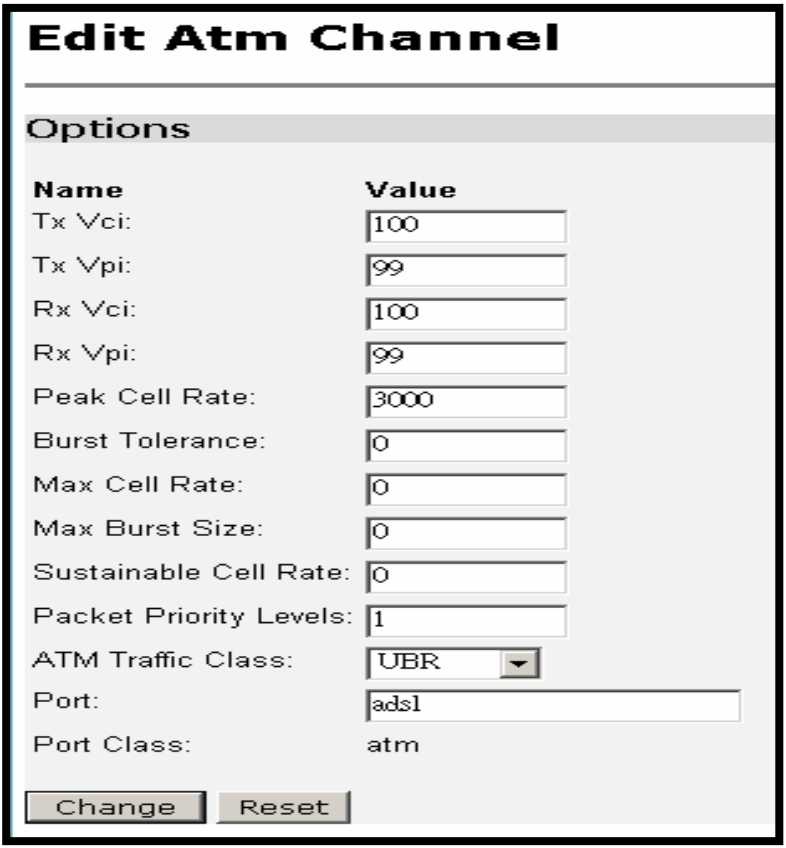

Edit Creator, Description, Atm Protocol.

### 2.5.2.1.2 Edit a service RFC 1483 routed/Edit RFC1483



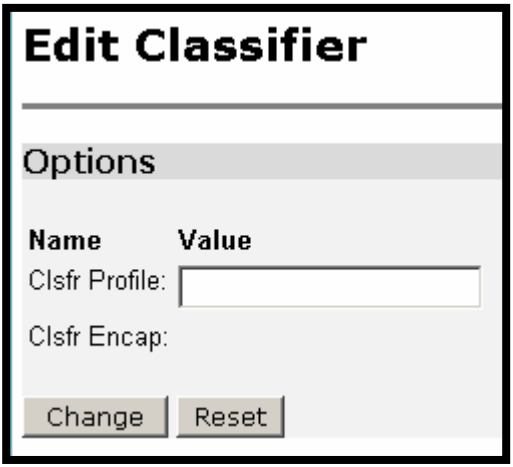

Edit Mode, MAC, Type, Snmp If Index, If In Octets, If Out Octets, If In Errors, If Out Errors, Packets Sent, Good Packets, Channel Snmp If Index, Version, Enabled, and see Termination.
Mode: LlcRouted, LlcBridged, VcMuxBridged, VcMuxRouted
Enabled: true, false

### 2.5.2.1.3 Edit a service RFC 1483 routed /Edit Atm Channel



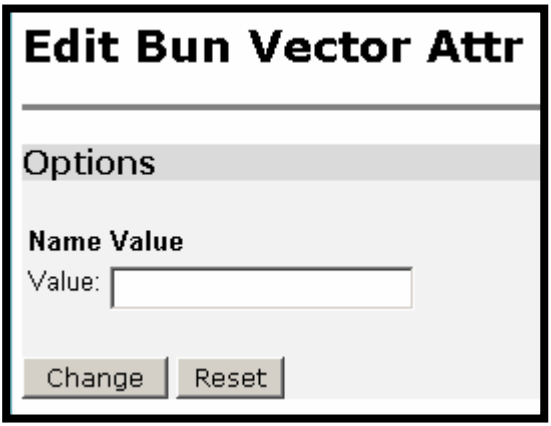

Edit Tx Vci, Tx Vpi, Rx Vci, Rx Vpi, Peak Cell Rate, Burst Tolerance, Max Cell Rate, Max Burst Size, Sustainable Cell Rate, Packet Priority Levels, ATM Traffic Class, Port and see Port Class.
ATM Traffic Class: UBR, CBR, VBR-rt, VBR, ABR, UBRPluse,QFC

### 2.5.2.1.4 Edit a service RFC 1483 routed /Edit Classifier



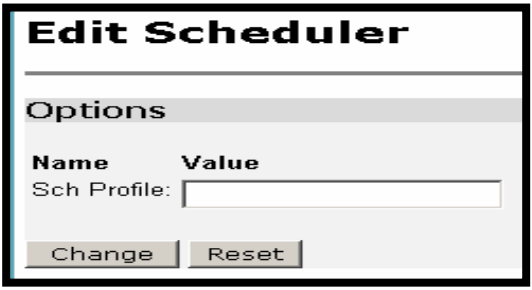

Edit Clsfr Profile and see Clsfr Encap.

### 2.5.2.1.5 Edit a service RFC 1483 routed /Edit Bun Vector Attr



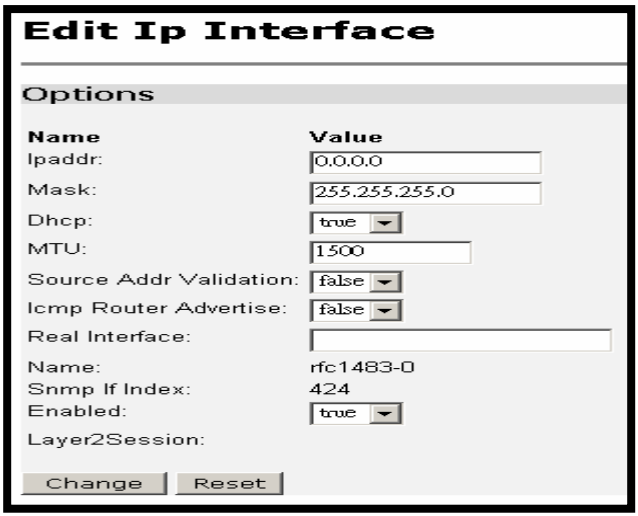

Edit the value of Bun Vector Attr.

### 2.5.2.1.6 Edit a service RFC 1483 routed /Edit Scheduler



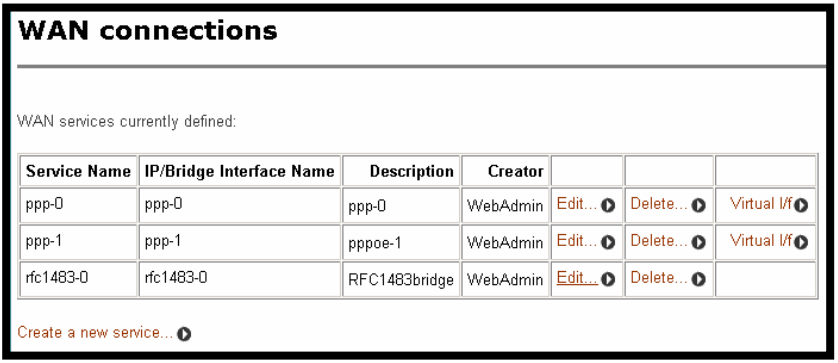

Edit Sch Profile.

### 2.5.2.1.7 Edit a service RFC 1483 routed /Edit Ip Interface




Edit Ipaddr, Mask, Dhcp, MTU, Source Addr Validation, Icmp Router Advertise, Real Interface, Enabled and see Name, Snmp If Index, Layer2Session.
Dhcp: true, false
Source Addr Validation: false, true
Icmp Router Advertise: false, true
Enabled: true, false

### 2.5.2.2 Edit a service RFC 1483 bridged

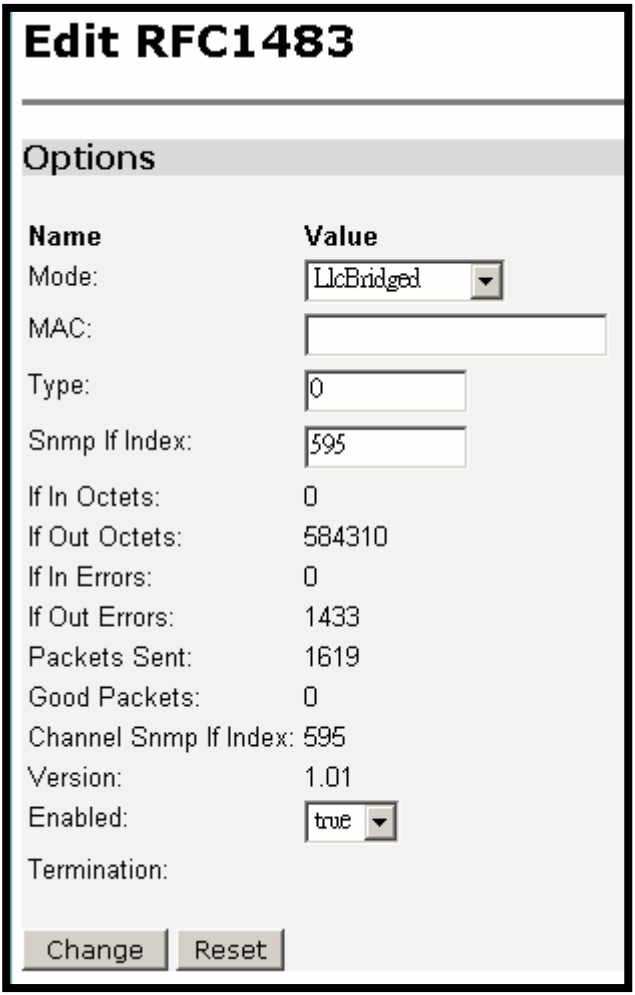



Edit RFC1483bridge service of the WAN connection.

#### 2.5.2.2.1 Edit a service RFC 1483 bridged /Edit Service

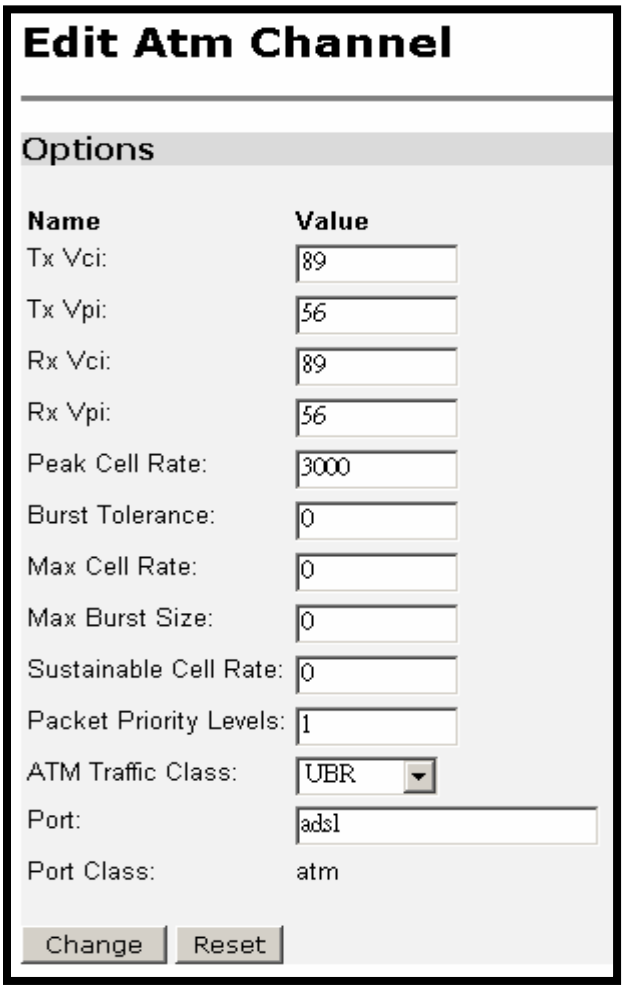
Edit Creator, Description, Atm Protocol.

### 2.5.2.2.2 Edit a service RFC 1483 bridged /Edit RFC1483



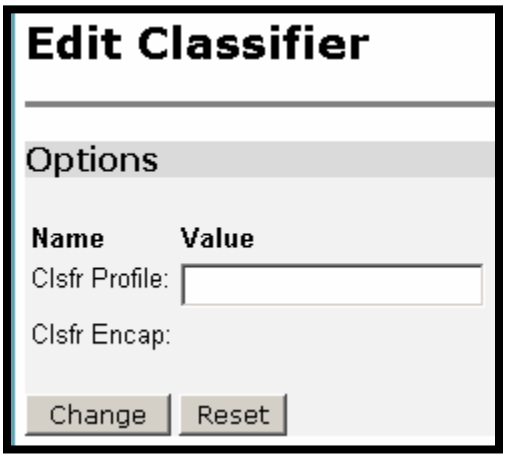

Edit Mode, MAC, Type, Snmp If Index, Enabled,
And see If In Octets, If Out Octets, If In Errors,
If Out Errors, Packets Sent, Good Packets,
Channel Snmp If Index, Version, Termination.

### 2.5.2.2.3 Edit a service RFC 1483 bridged /Edit Atm Channel



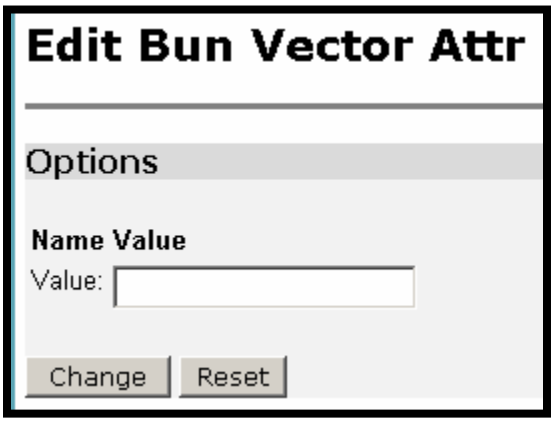

Edit Tx Vci, Tx Vpi, Rx Vci, Rx Vpi, Peak Cell Rate, Burst Tolerance, Max Cell Rate, Max Burst Size, Sustainable Cell Rate, Packet Priority Levels, ATM Traffic Class, Port and see Port Class.

### 2.5.2.2.4 Edit a service RFC 1483 bridged /Edit Classifier



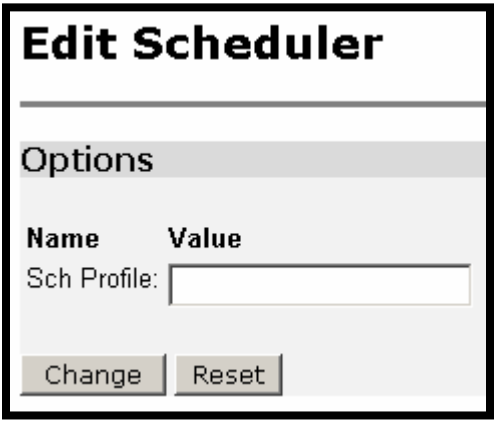

Edit Clsfr Profile and see Clsfr Encap.

### 2.5.2.2.5 Edit a service RFC 1483 bridged /Edit Bun Vector Attr



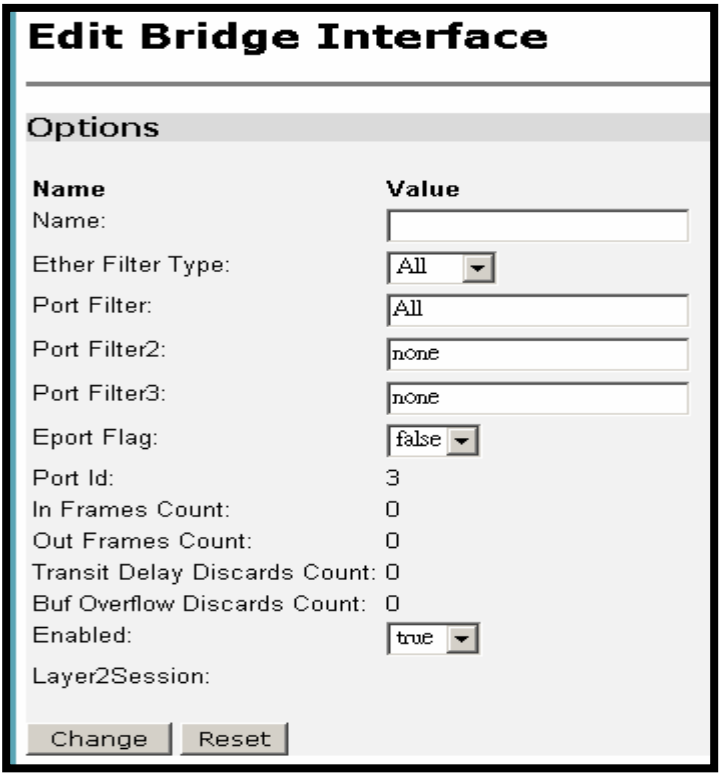

Edit the value of Bun Vector Attr.

### 2.5.2.2.6 Edit a service RFC 1483 bridged /Edit Scheduler



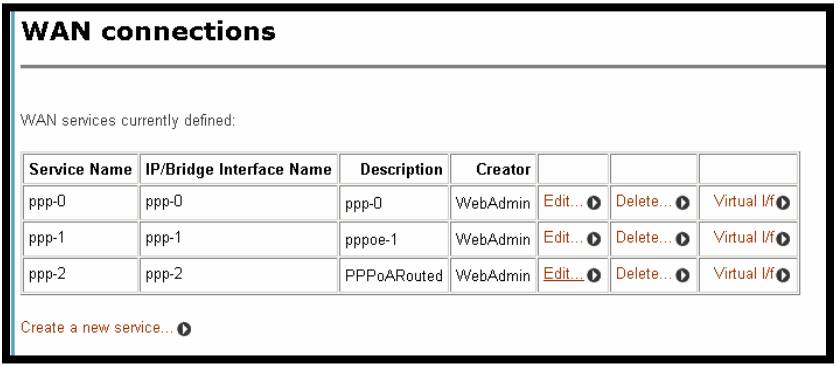

Edit Sch Profile.

### 2.5.2.2.7 Edit a service RFC 1483 bridged /Edit Bridge Interface



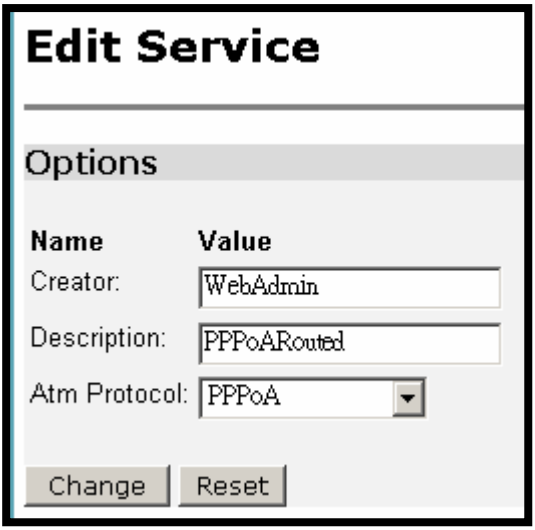

Edit Name, Ether Filter Type, Port Filter, Port Filter2, Port Filter3, Eport Flag, Enabled and see Port Id, In Frames Count, Out Frames Count, Transit Delay Discards Count, Buf Overflow Discards Count, Layer2Session.

### 2.5.2.3 Edit a service PPPoA routed



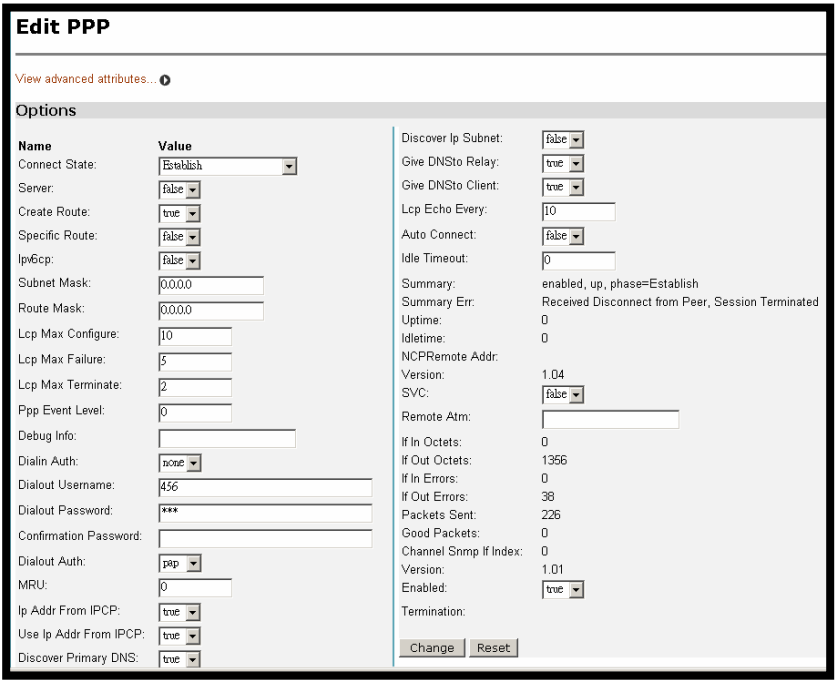

Edit a service PPPoA routed of the WAN connection.

#### 2.5.2.3.1 Edit a service PPPoA routed /Edit Service



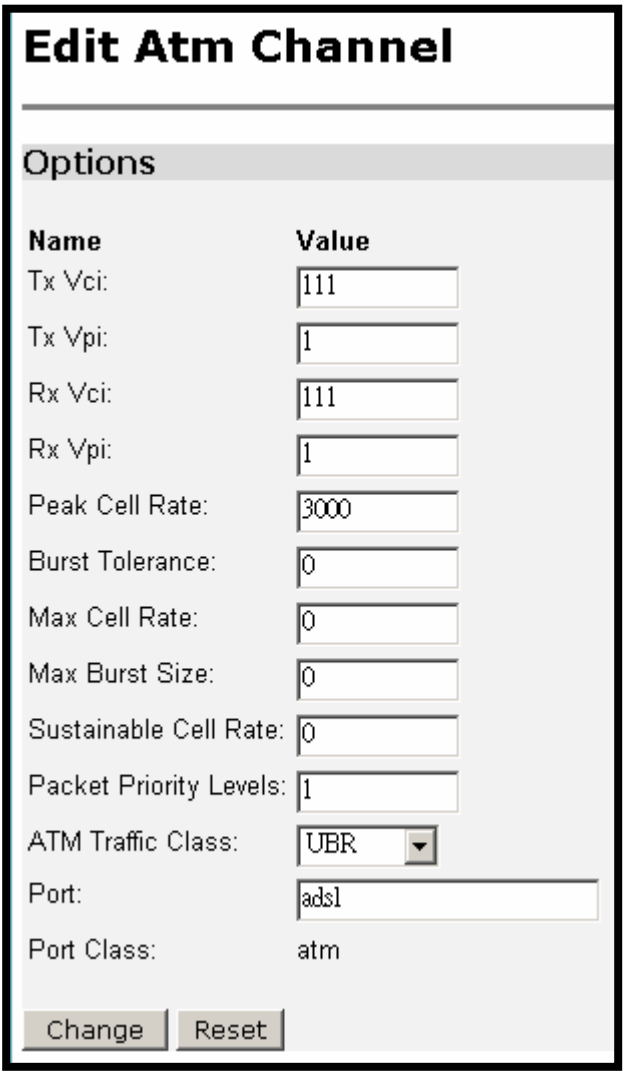

Edit Creator, Description, Atm Protocol.

## 2.5.2.3.2 Edit a service PPPoA routed /Edit PPP



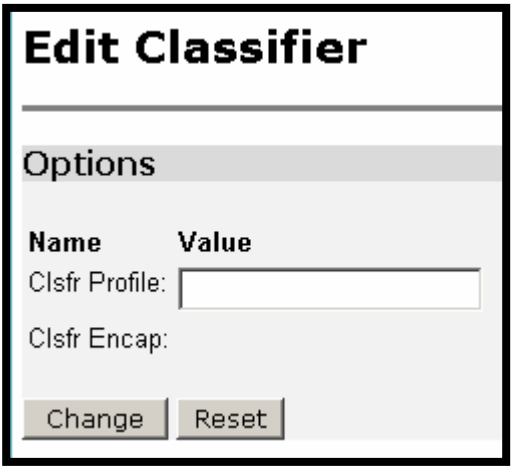

You can see all settings of PPPoA from this page.
And Edit values where you can modify and choose them.

### 2.5.2.3.3 Edit a service PPPoA routed /Edit Atm Channel



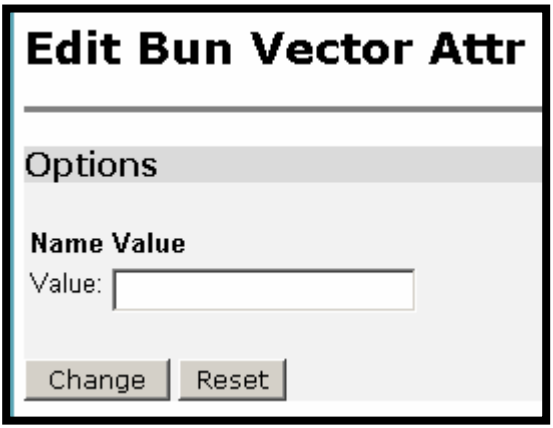

The setting about ATM Channel.

### 2.5.2.3.4 Edit a service PPPoA routed /Edit Classifier



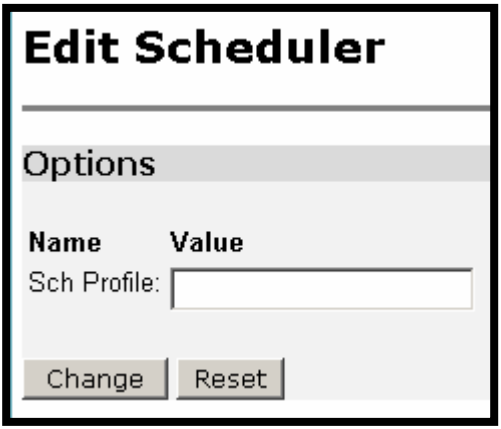

Edit Clsfr Profile and see Clsfr Encap.

### 2.5.2.3.5 Edit a service PPPoA routed



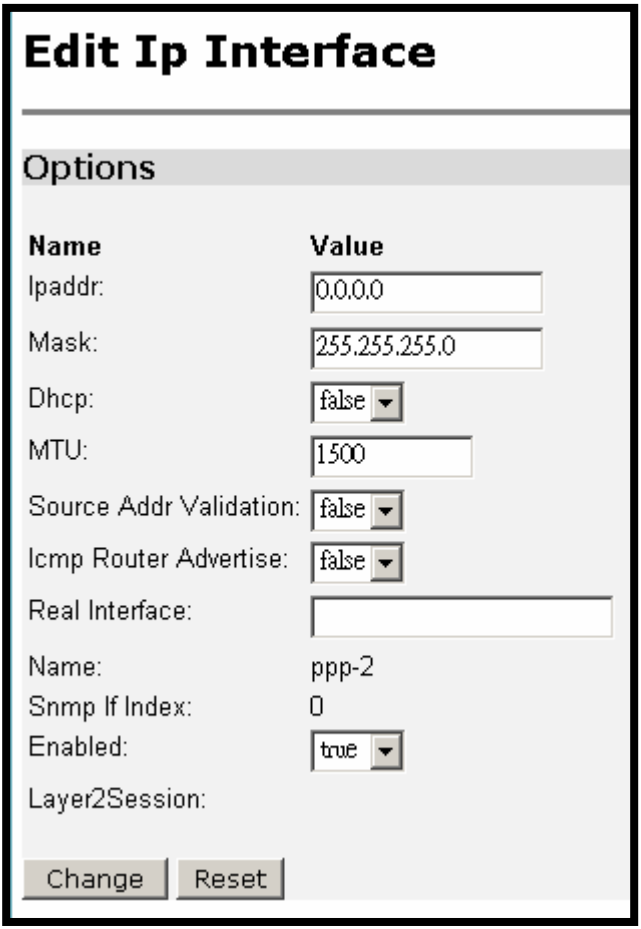

Edit the value of Bun Vector Attr.

### 2.5.2.3.6 Edit a service PPPoA routed /Edit Scheduler



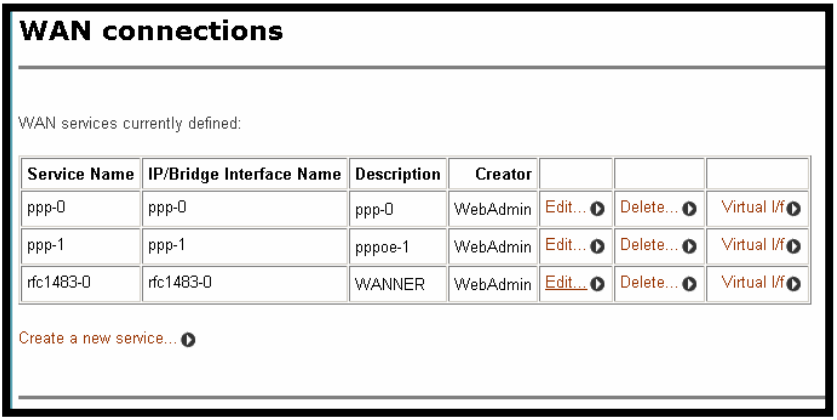

Edit Sch Profile Value of the Scheduler.

### 2.5.2.3.7 Edit a service PPPoA routed /Edit IP Interface



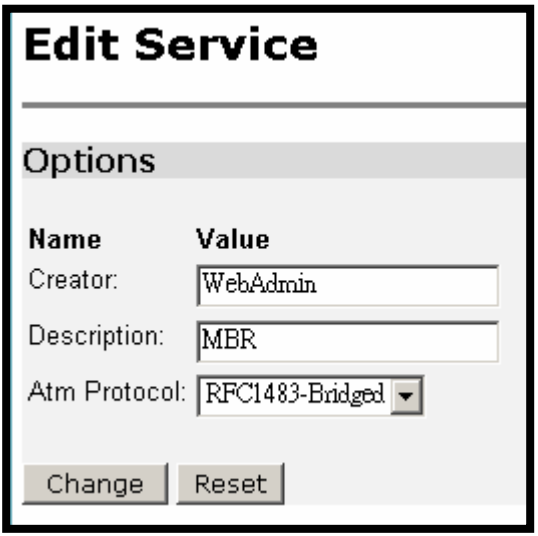

Edit Ipaddr, Mask, Dhcp, MTU, Source Addr Validation, Icmp Router Advertise, Enabled and see Name, Snmp If Index, Layer2Session.

### 2.5.2.4 Edit a service MER(bridge with NAT)



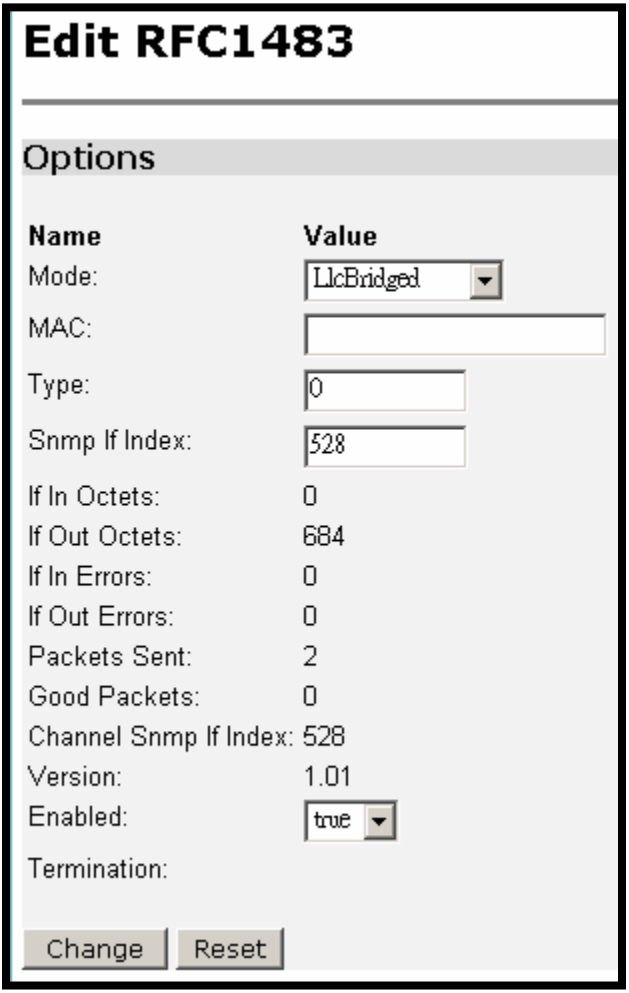

Edit current WAN connection in a service MER.

#### 2.5.2.4.1 Edit a service MER(bridge with NAT) /Edit Service



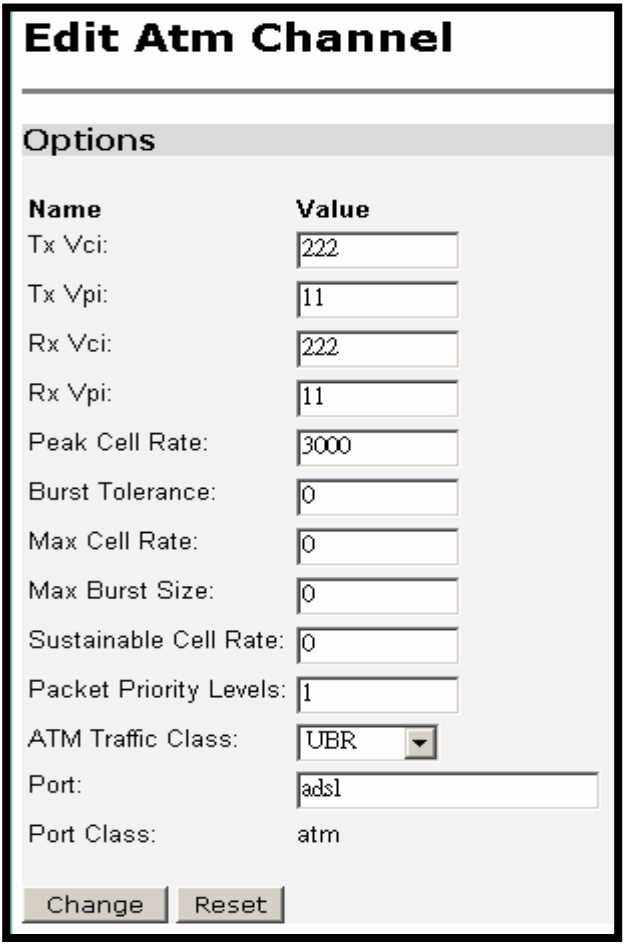

Edit Creator, Description, Atm Protocol.

2.5.2.4.2 Edit a service MER(bridge with NAT)
/Edit RFC1483



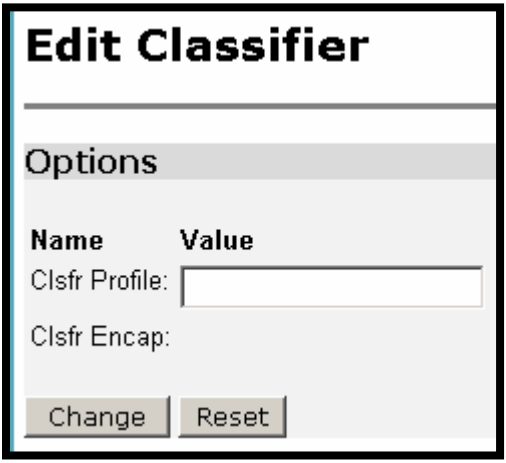

Edit Mode, MAC, Type, Snmp If Index, Enabled,
And see If In Octets, If Out Octets, If In Errors,
If Out Errors, Packets Sent, Good Packets,
Channel Snmp If Index, Version, Termination.

2.5.2.4.3 Edit a service MER(bridge with NAT)
\Edit Atm Channel



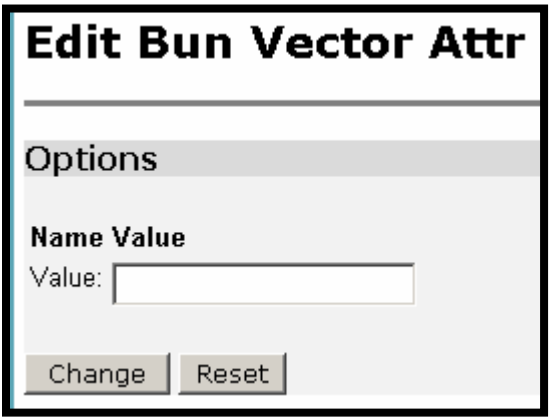

Edit Tx Vci, Tx Vpi, Rx Vci, Rx Vpi, Peak Cell Rate, Burst Tolerance, Max Cell Rate, Max Burst Size, Sustainable Cell Rate, Packet Priority Levels, ATM Traffic Class, Port and see Port Class.
ATM Traffic Class: UBR, CBR, VBR-rt, VBR, ABR, UBRPluse,QFC

2.5.2.4.4 Edit a service MER(bridge with NAT)
/Edit Classifier



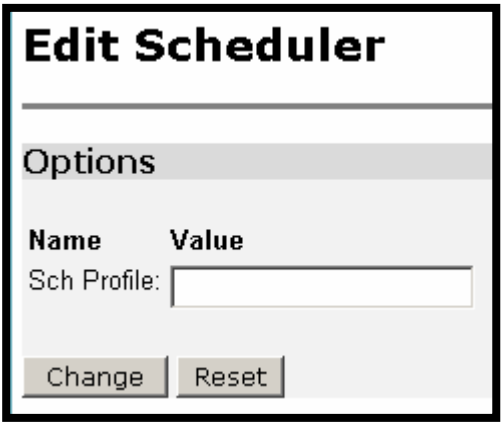

Edit Clsfr Profile and see Clsfr Encap.

2.5.2.4.5 Edit a service MER(bridge with NAT)
/Edit Bun Vector Attr



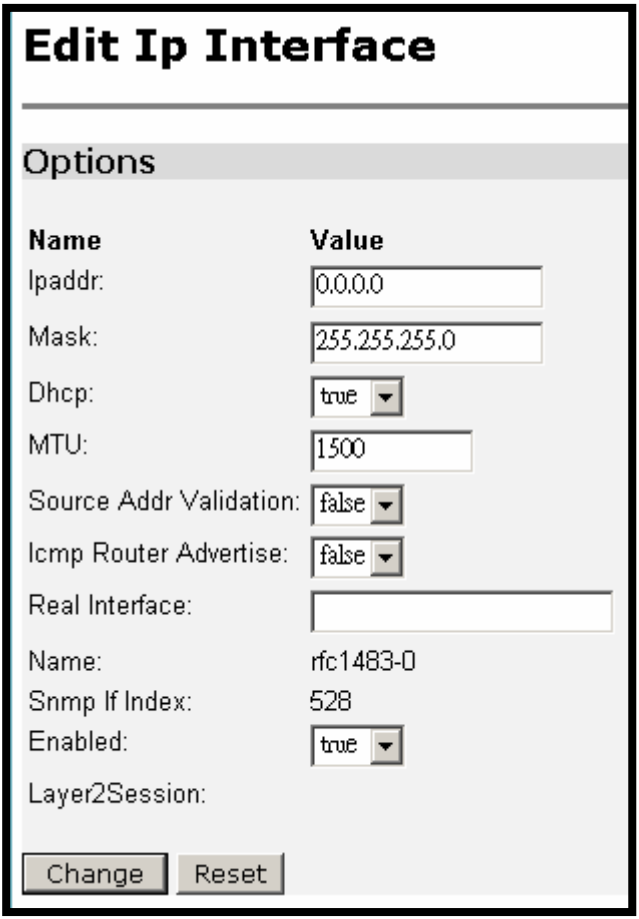

Edit the Value of Bun Vector Attr.

### 2.5.2.4.6 Edit a service MER(bridge with NAT) /Edit Scheduler



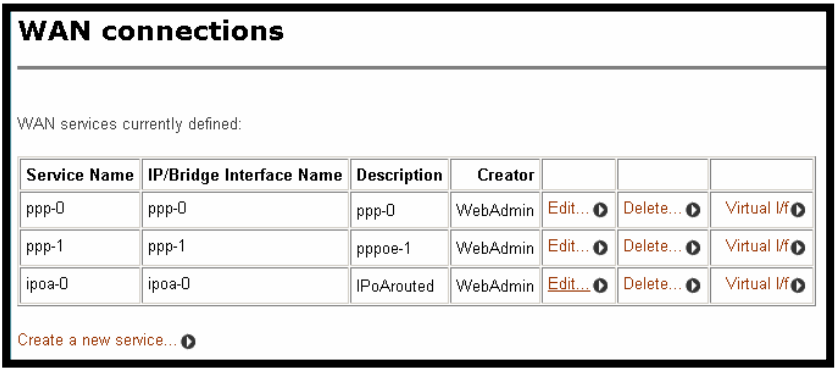

Edit Sch Profile.

2.5.2.4.7 Edit a service MER(bridge with NAT)
/Edit



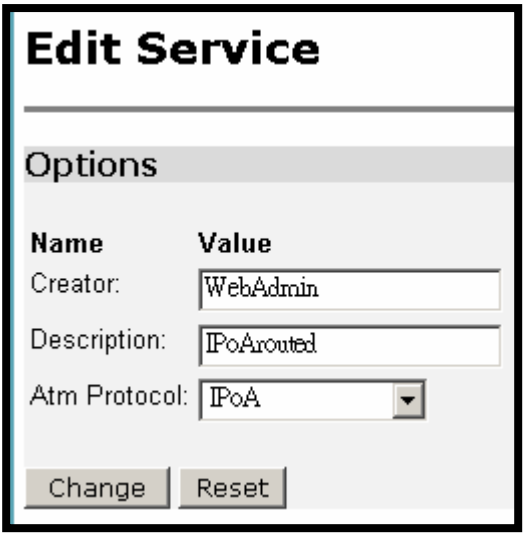

Edit Ipaddr, Mask, Dhcp, MTU, Source Addr Validation, Icmp Router Advertise, Enabled and see Name, Snmp If Index, Layer2Session.

## 2.5.2.5 Edit a service IpoA routed



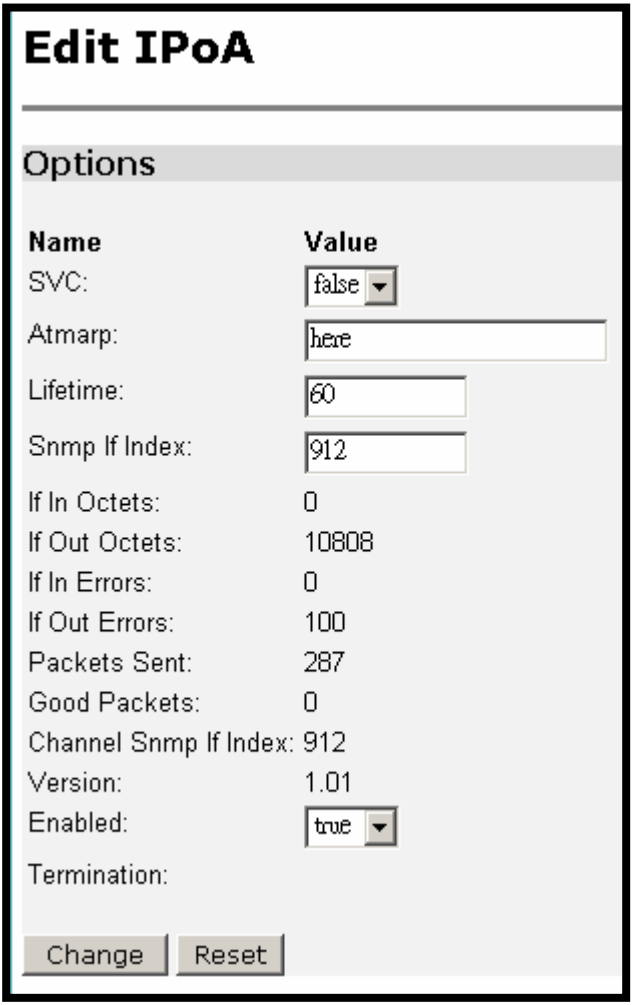

Edit the current WAN connection with a service IpoA routed.

### 2.5.2.5.1 Edit a service IpoA routed/Edit Service



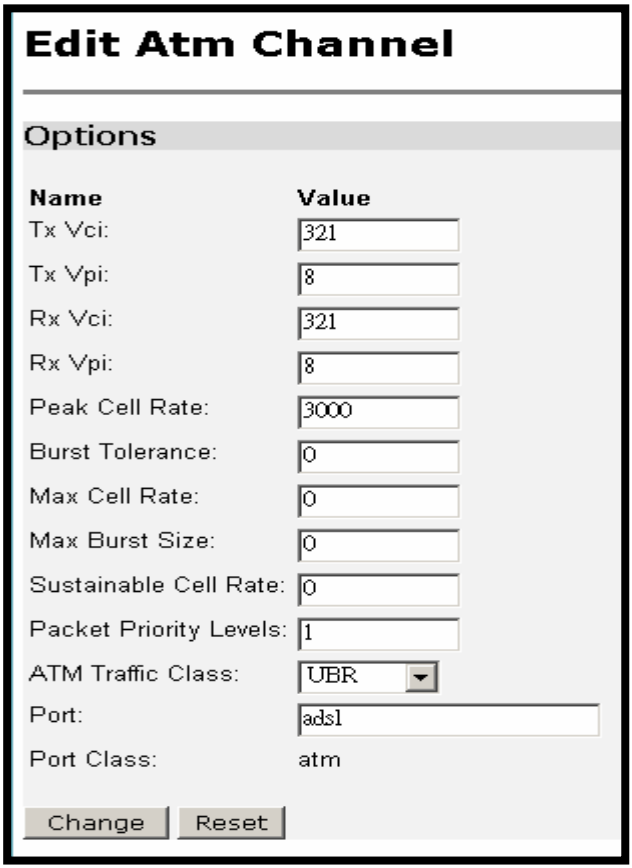

Edit Creator, Description, Atm Protocol.

### 2.5.2.5.2 Edit a service IpoA routed/Edit IPoA



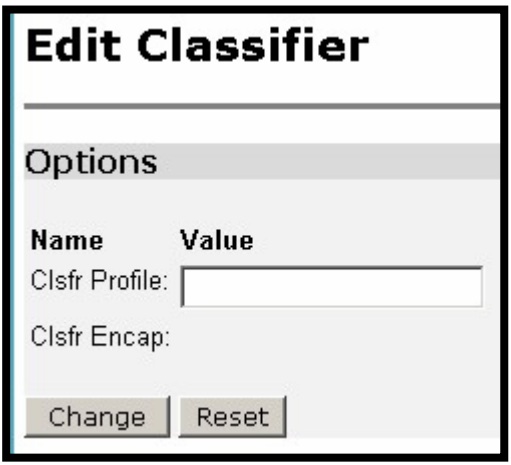

Edit SVC, Atmarp, Lifetime, Snmp If Index, Enabled and see If In Octets, If Out Octets, If In Errors, If Out Errors, Packets Sent, Good Packets, Channel Snmp If Index, Version, Termination.

### 2.5.2.5.3 Edit a service IpoA routed/Edit Atm Channel

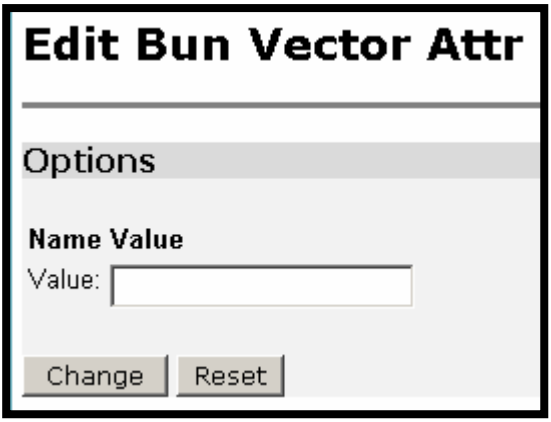



Edit Tx Vci, Tx Vpi, Rx Vci, Rx Vpi, Peak Cell Rate, Burst Tolerance, Max Cell Rate, Max Burst Size, Sustainable Cell Rate, Packet Priority Levels, ATM Traffic Class, Port and see Port Class.
ATM Traffic Class: UBR, CBR, VBR-rt, VBR, ABR, UBRPluse,QFC

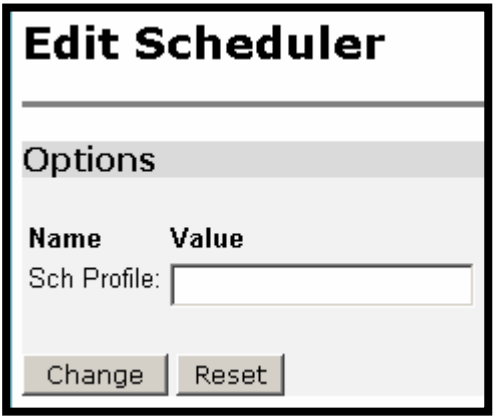
2.5.2.5.4 Edit a service IpoA routed/Edit Classifier




2.5.2.5.5 Edit a service IpoA routed/Edit Bun Vector Attr

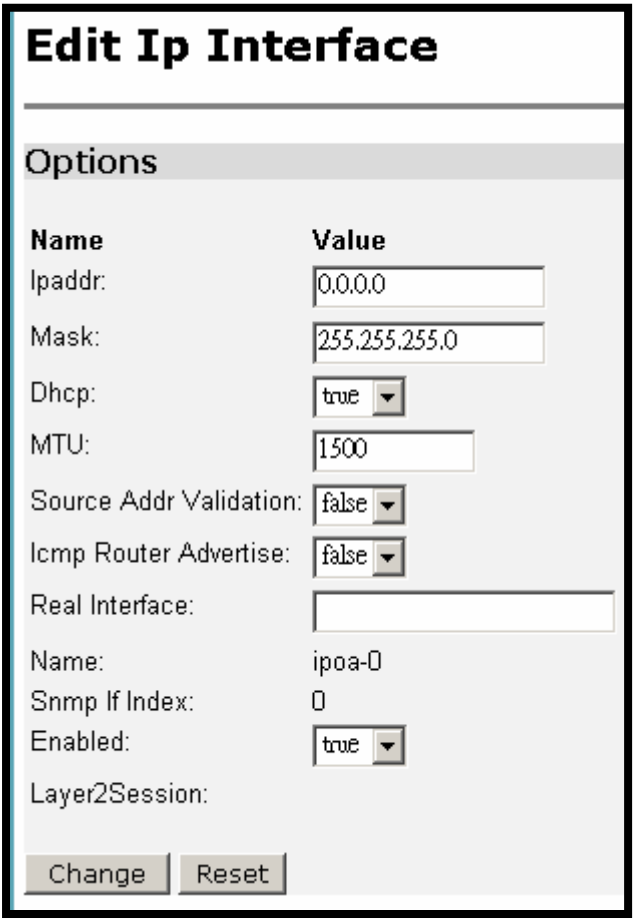


### 2.5.2.5.6 Edit a service IpoA routed/Edit Scheduler



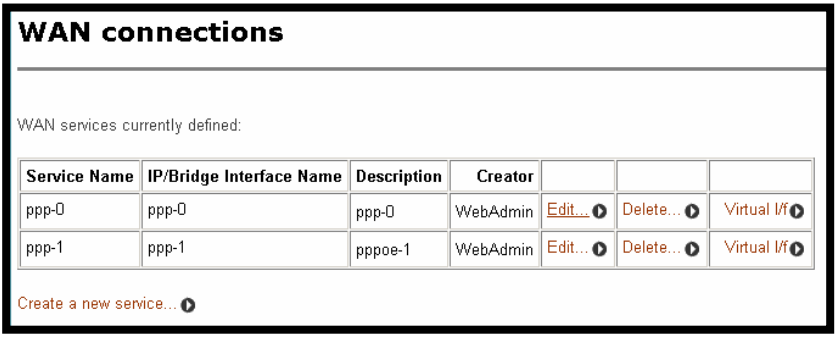

Edit Sch Profile.

### 2.5.2.5.7 Edit a service IpoA routed/Edit Ip Interface



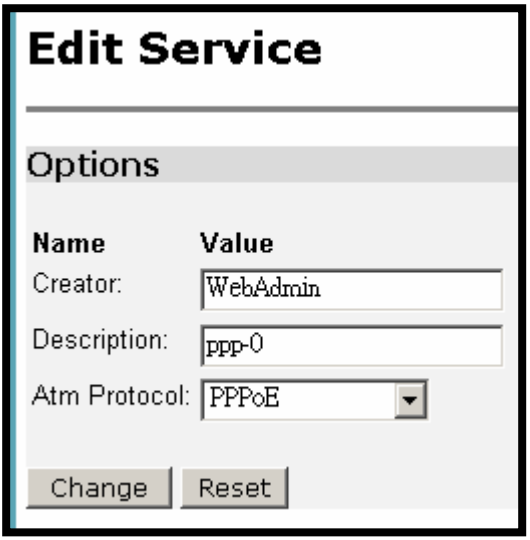

Edit Ipaddr, Mask, Dhcp, MTU, Source Addr Validation, Icmp Router Advertise, Real Interface, Enabled and see Name, Snmp If Index, Layer2Session.
Dhcp: true, false
Source Addr Validation: false, true
Icmp Router Advertise: false, true
Enabled: true, false

### 2.5.2.6 Edit a service PPPoE routed



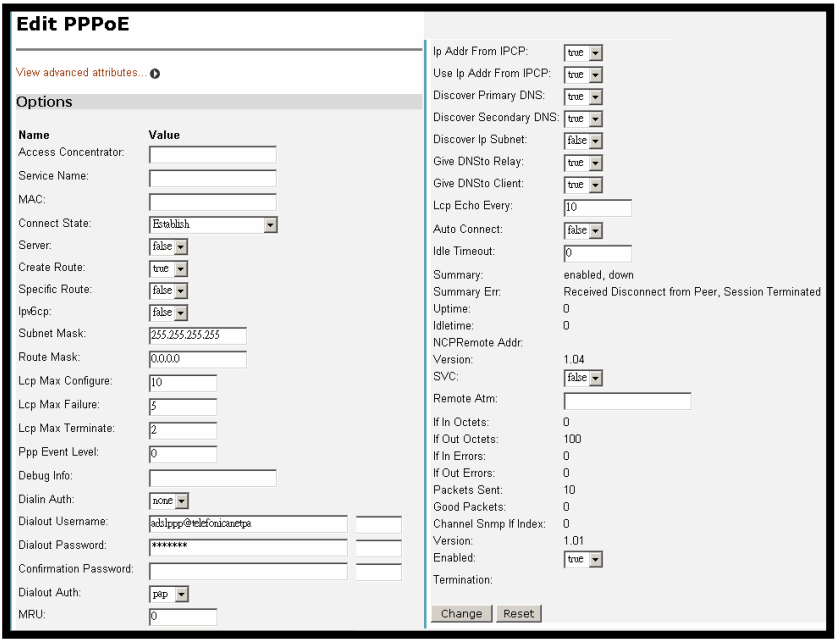

Edit a WAN connection of the service PPPoE routed.

### 2.5.2.6.1 Edit a service PPPoE routed/Edit Service



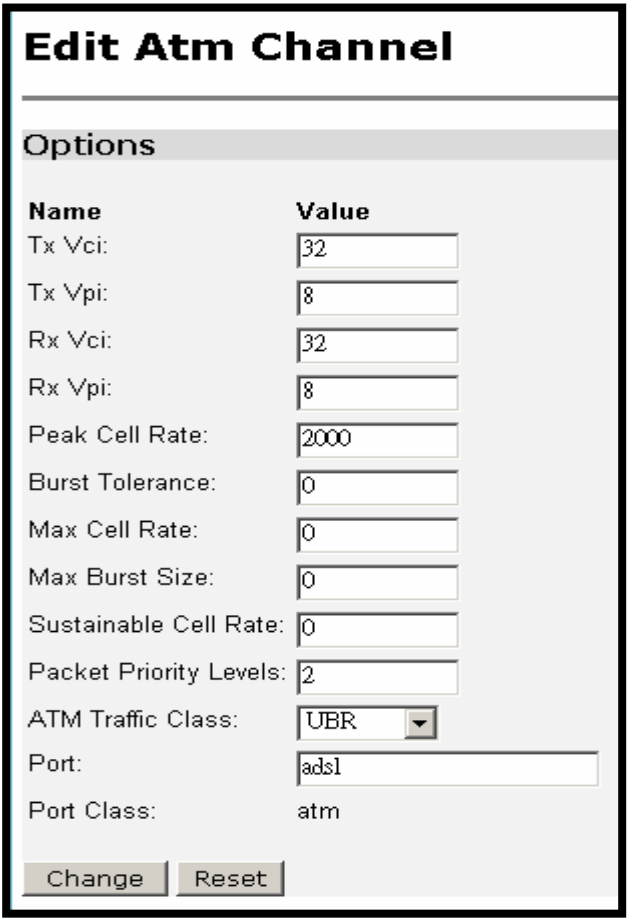

Edit Creator, Description, Atm Protocol.

## 2.5.2.6.2 Edit a service PPPoE routed/Edit PPPoE



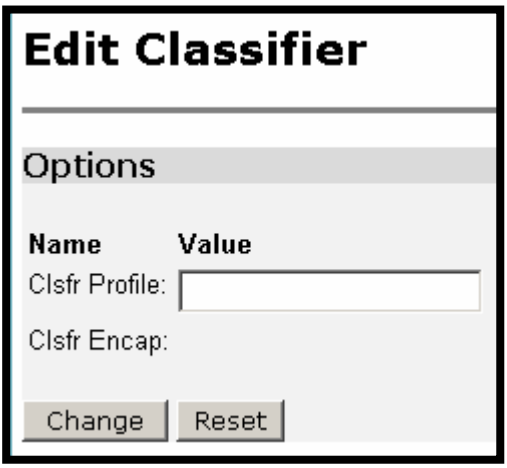

Edit and see whole settings of the PPPoE routed.

### 2.5.2.6.3 Edit a service PPPoE routed/Edit Atm Channel



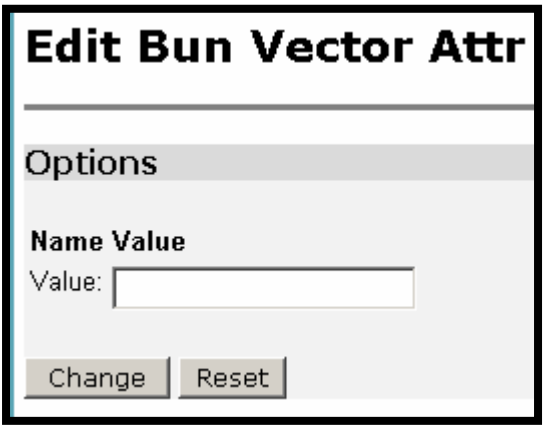

Edit Tx Vci, Tx Vpi, Rx Vci, Rx Vpi, Peak Cell Rate, Burst Tolerance, Max Cell Rate, Max Burst Size, Sustainable Cell Rate, Packet Priority Levels, ATM Traffic Class, Port and see Port Class.
ATM Traffic Class: UBR, CBR, VBR-rt, VBR, ABR, UBRPluse,QFC

### 2.5.2.6.4 Edit a service PPPoE routed/Edit Classifier



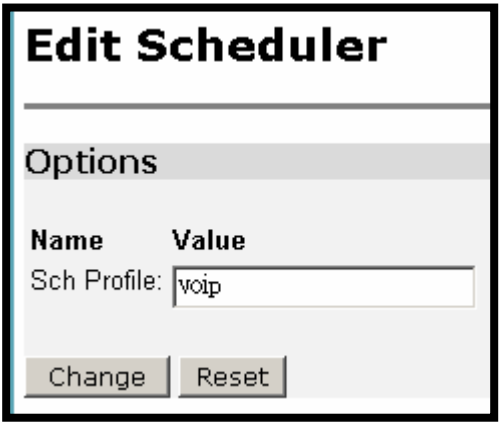

Edit Clsfr Profile, Clsfr Encap.

### 2.5.2.6.5 Edit a service PPPoE routed /Edit Bun Vector Attr



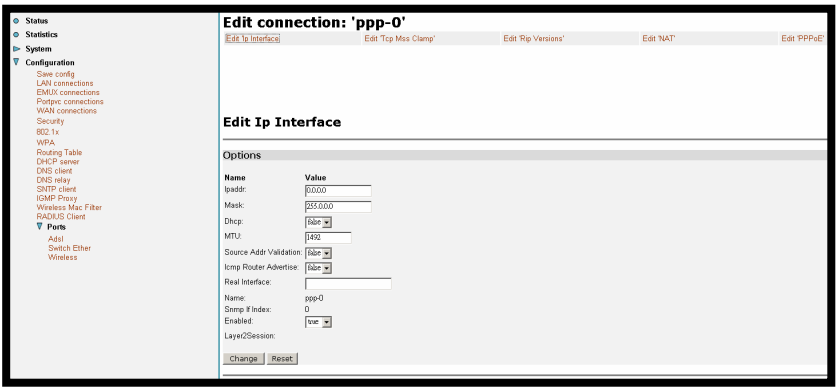

Edit the Value of the Bun Vector Attr.

### 2.5.2.6.6 Edit a service PPPoE routed/Edit Scheduler




Edit Sch Profile.

### 2.5.2.7.1 Edit a service PPPoE routed/ Edit Ip Interface

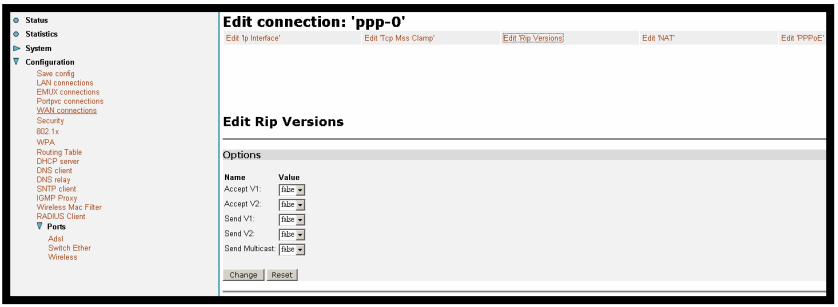



Edit Ipaddr, Mask, Dhcp, MTU, Source Addr Validation, Icmp Router Advertise, Real Interface, Enabled and see Name, Snmp If Index, Layer2Session.
Dhcp: true, false
Source Addr Validation: false, true
Icmp Router Advertise: false, true
Enabled: true, false

## 2.5.2.7.2 Edit a service PPPoE routed /Edit Tcp Mss Clamp

Edit Tcp Mss Clamp.
TCP MSS Clamp: true, false

## 2.5.2.7.3 Edit a service PPPoE routed /Edit Rip Versions

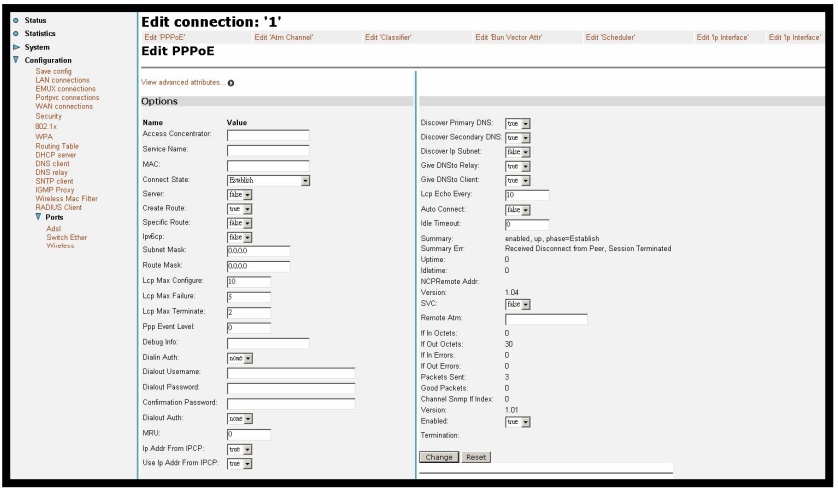



Edit Accept V1, Accept V2, Send V1, Send V2, Send Multicast
Accept V1: false, true
Accept V2: false, true
Send V1: false, true
Send V2: false, true
Send Multicast: false, true

## 2.5.2.7.4 Edit a service PPPoE routed /Edit NAT

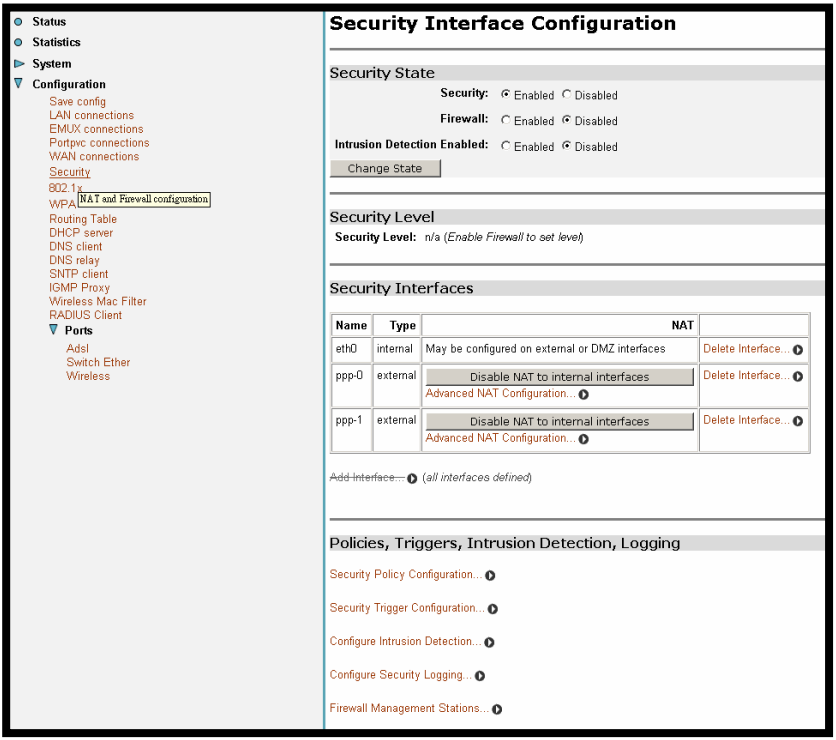
Edit Nat Enabled.
Nat Enabled: true, false

## 2.5.2.7.5 Edit a service PPPoE routed /Edit PPPoE



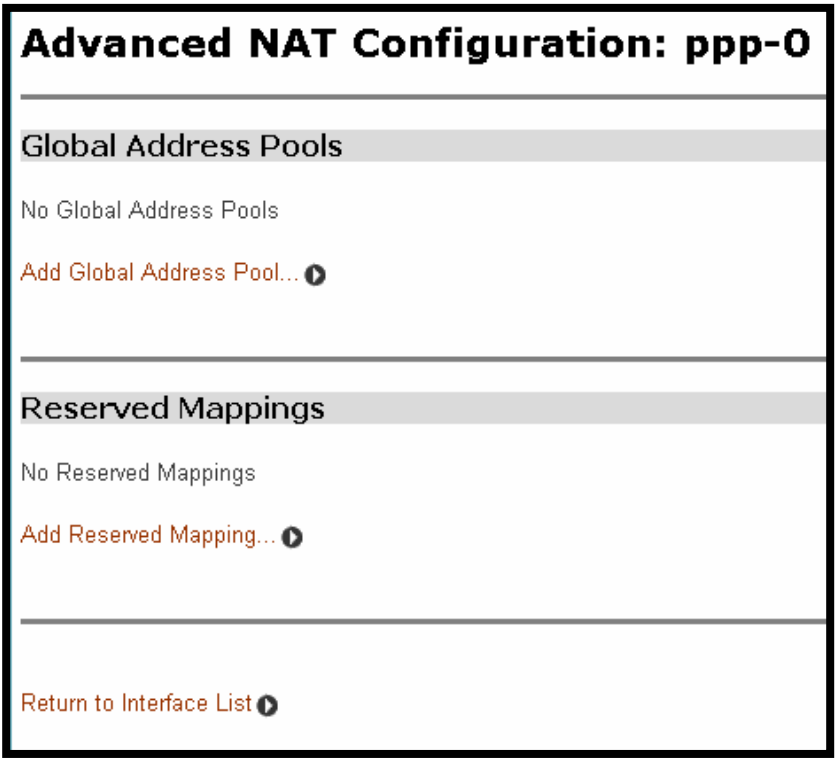

Edit and see whole settings of PPPoE.

## 2.6 Configuration Security



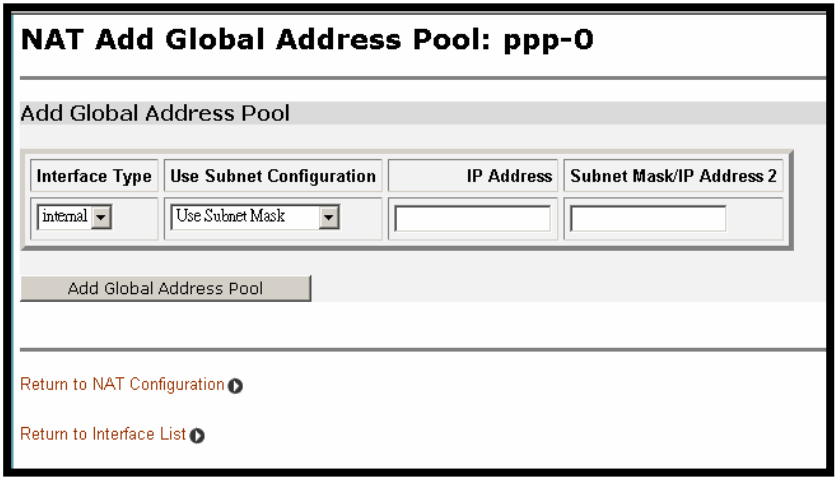

You can choose what Security State, Security Level, Security Interfaces, Policies, Triggers, Intrusion Detection, Loggin you want to set it.

## 2.6.1 Configuration Security /Advanced NAT Configuration: ppp-0



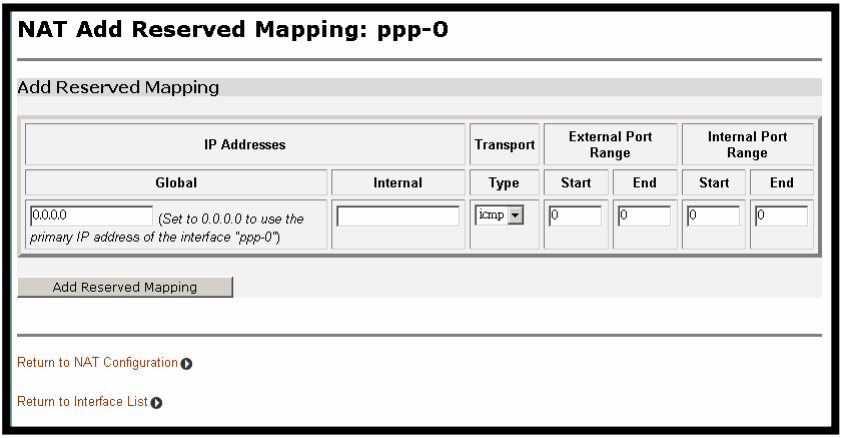

Add Globa Address Pools or
Add Reserved Mapping from this page.

2.6.1.1 Configuration Security
/Advanced NAT Configuration: ppp-0
/NAT Add Global Address Pool: ppp-0



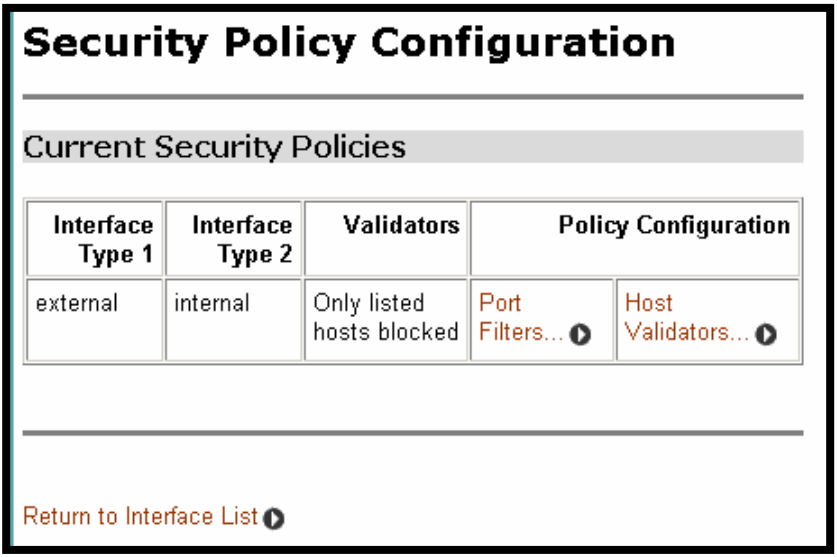

Edit Interface Type, Use Subnet Configuration, Ip Address, Subnet Mask/IP Address 2.
**Use Subnet Configuration: Use Subnet Mask,**
Use IP Address Range

## 2.6.1.2 Configuration Security
/Advanced NAT Configuration: ppp-0
/NAT Add Reserved Mapping:ppp-0



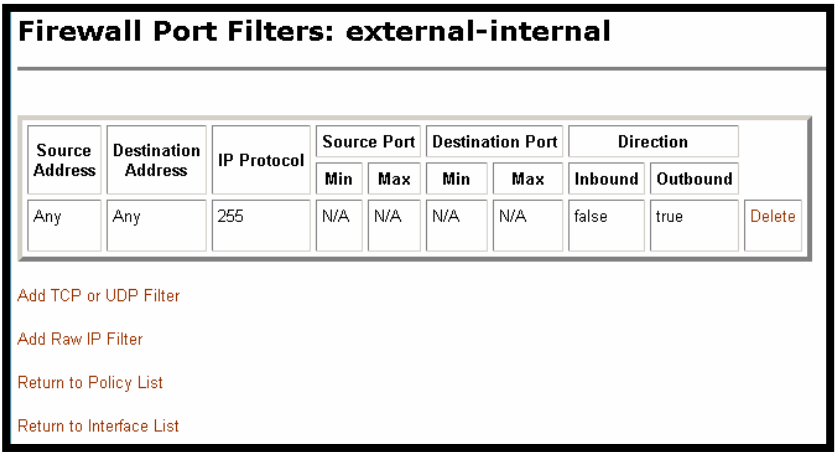

Edit **IP Addresses, Transport, External Port Range, Internal Port Range.**
(*Set to 0.0.0.0 to use the primary IP address of the interface "ppp-0"*)

## 2.6.2 Configuration Security
/Security Policy Configuration



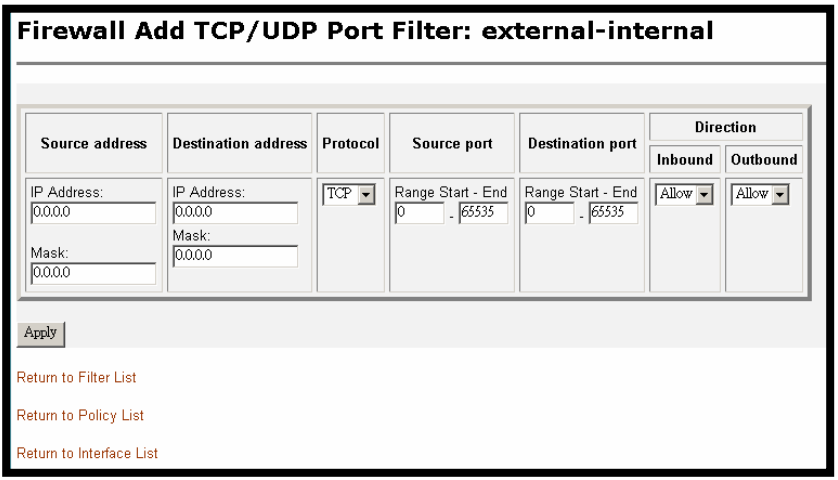

Edit Policy Configuration.
Port Filters, Host Validators

## 2.6.2.1 Configuration Security /Security Policy Configuration/Port Filters



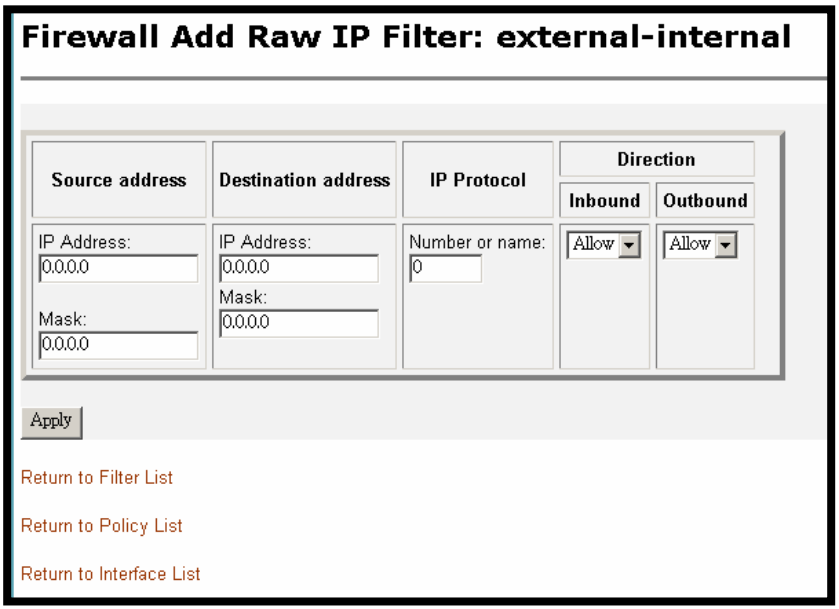

Show or delete Firewall Port Filters.
And you can add TCP or UDP Filter, Add Raw IP Filter.

### 2.6.2.1.1 Configuration Security /Security Policy Configuration/Port Filters /Firewall Add TCP/UDP Port Filter



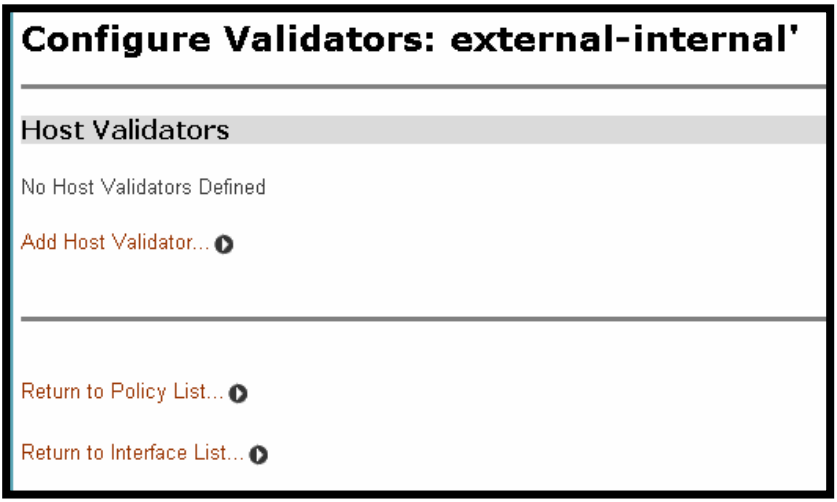

Edit a policy.

## 2.6.2.1.2 Configuration Security
/Security Policy Configuration/Port Filters
/Firewall Add Raw IP Filter



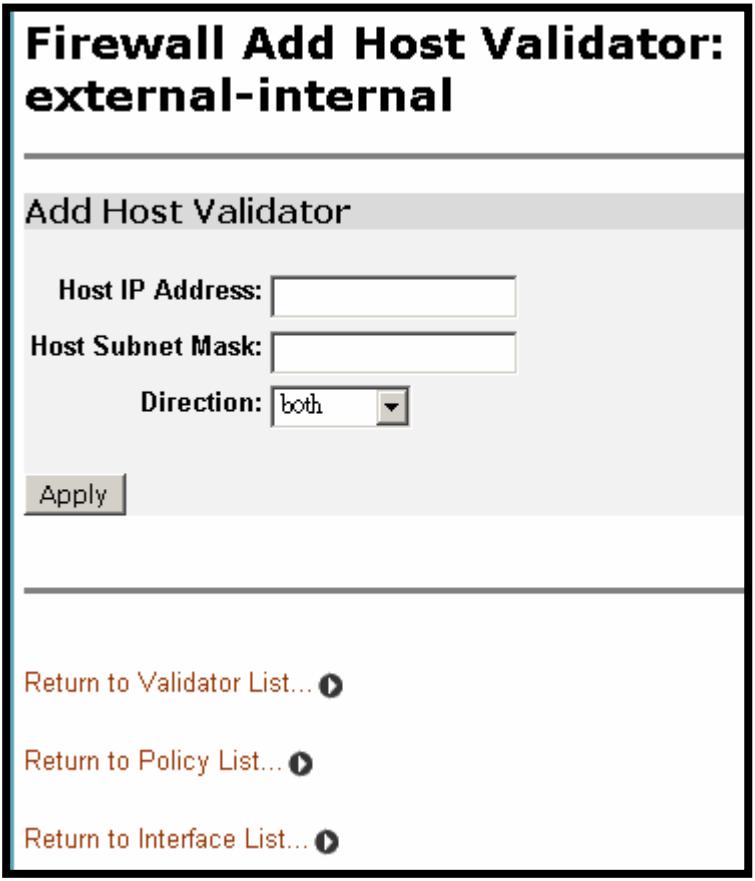

Edit a policy.

### 2.6.2.2 Configuration Security /Security Policy Configuration/Host Validators



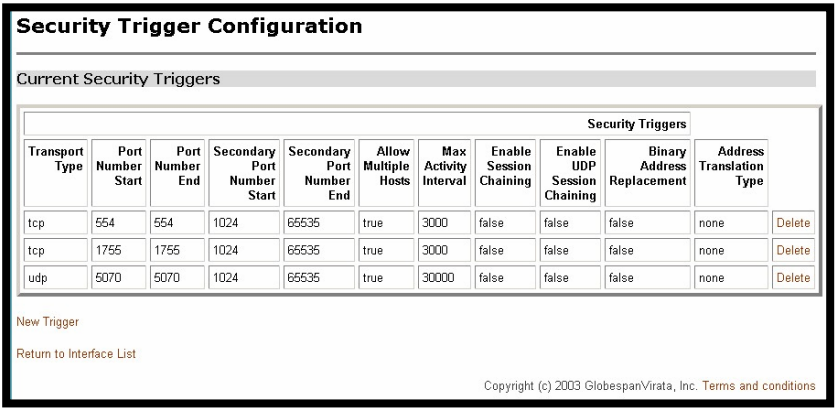

Add Host Validators.

### 2.6.2.2.1 Configuration Security
/Security Policy Configuration/Host Validator
/Add Host Validator




Let you know about the setting of :
Firewall Add Host Validator: external-internal

## 2.6.3 Configuration Security
/Security Trigger Configuration
/Current Security Trigger


Security Trigger Configuration
Current Security Triggers
Security Triggers
Transport Type
Port Number Start
Port Number End
Secondary Port Number Start
Secondary Port Number End
Allow Multiple Hosts
Max Activity Interval
Enable Session Chaining
Enable UDP Session Chaining
Binary Address Replacement
Address Translation Type
tcp 554 554 1024 65535 true 3000 false false false none Delete
tcp 1755 1755 1024 65535 true 3000 false false false none Delete
udp 5070 5070 1024 65535 true 30000 false false false none Delete
New Trigger
Return to Interface List
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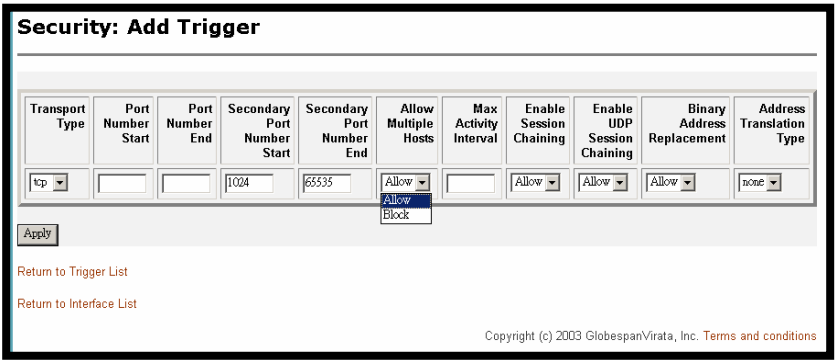
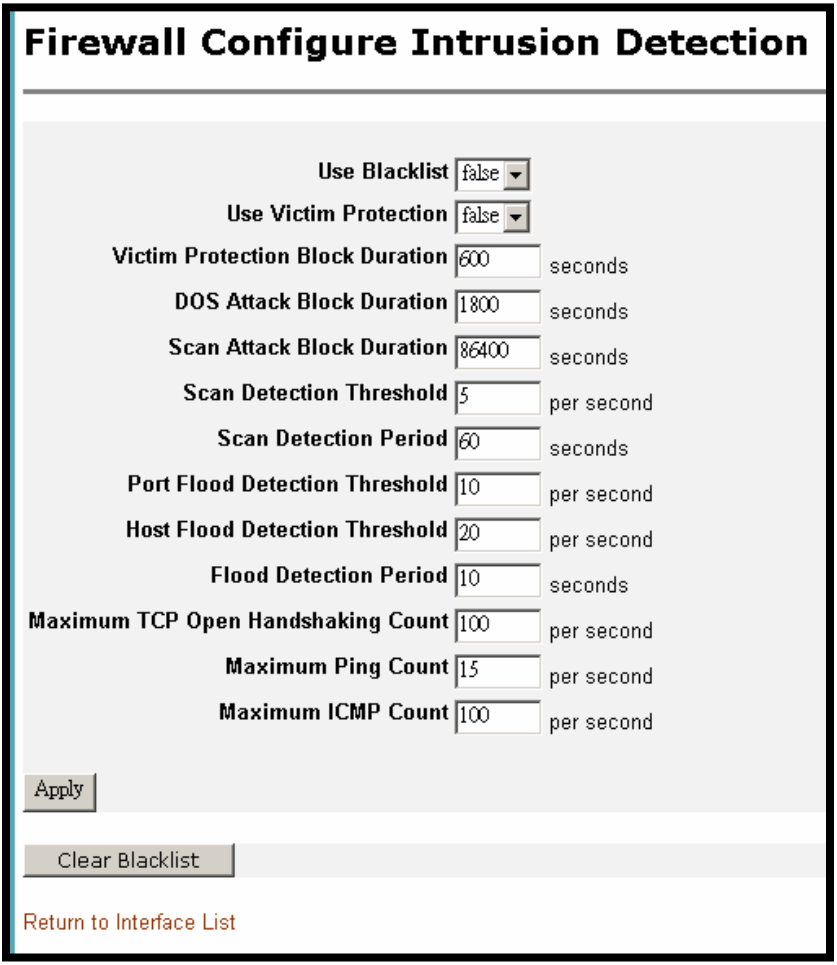
## 2.6.3.1 Configuration Security
/Security Trigger Configuration
/Security:Add Trigger



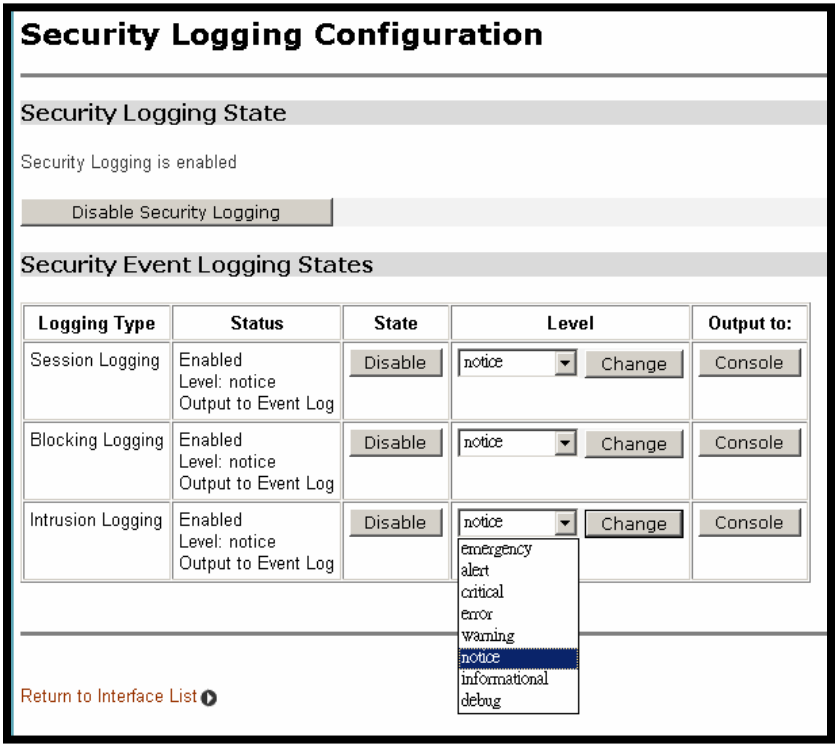

Add Trigger.

## 2.6.4 Configuration Security /Firewall Configure Intrusion Detection



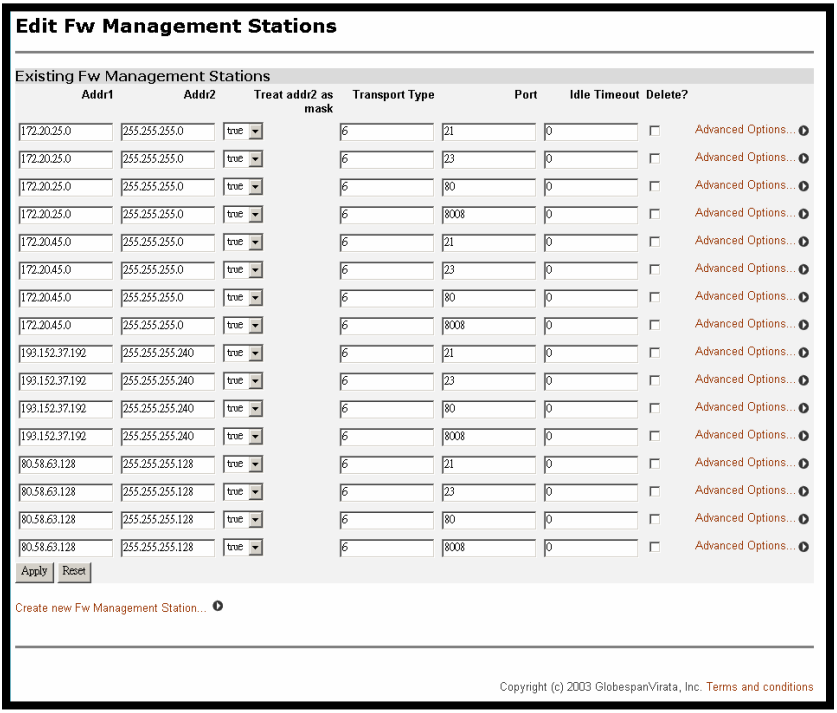

Edit Firewall Configure Intrusion Detection.

## 2.6.5 Configuration Security /Security Logging Configuration




Edit Security Logging Configuration.

# 2.6.6 Configuration Security /Edit Firewall Management Station


Edit Fw Management Stations
Existing Fw Management Stations
Addr1
Addr2
Treat addr2 as mask
Transport Type
Port
Idle Timeout
Delete?
172.20.25.0 255.255.255.0 true 6 21 0 Advanced Options...
172.20.25.0 255.255.255.0 true 6 23 0 Advanced Options...
172.20.25.0 255.255.255.0 true 6 80 0 Advanced Options...
172.20.25.0 255.255.255.0 true 6 8008 0 Advanced Options...
172.20.45.0 255.255.255.0 true 6 21 0 Advanced Options...
172.20.45.0 255.255.255.0 true 6 23 0 Advanced Options...
172.20.45.0 255.255.255.0 true 6 80 0 Advanced Options...
172.20.45.0 255.255.255.0 true 6 8008 0 Advanced Options...
193.152.37.192 255.255.255.240 true 6 21 0 Advanced Options...
193.152.37.192 255.255.255.240 true 6 23 0 Advanced Options...
193.152.37.192 255.255.255.240 true 6 80 0 Advanced Options...
193.152.37.192 255.255.255.240 true 6 8008 0 Advanced Options...
80.58.63.128 255.255.255.128 true 6 21 0 Advanced Options...
80.58.63.128 255.255.255.128 true 6 23 0 Advanced Options...
80.58.63.128 255.255.255.128 true 6 80 0 Advanced Options...
80.58.63.128 255.255.255.128 true 6 8008 0 Advanced Options...
Apply
Reset
Create new Fw Management Station...
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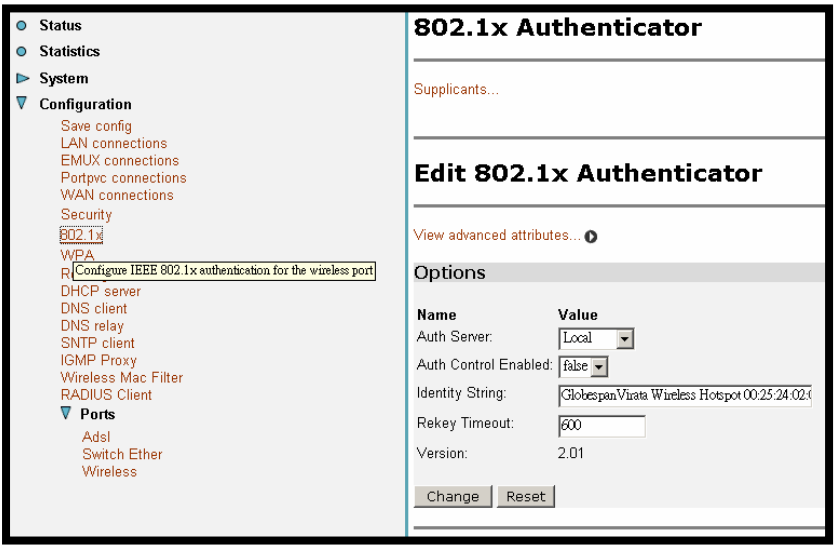
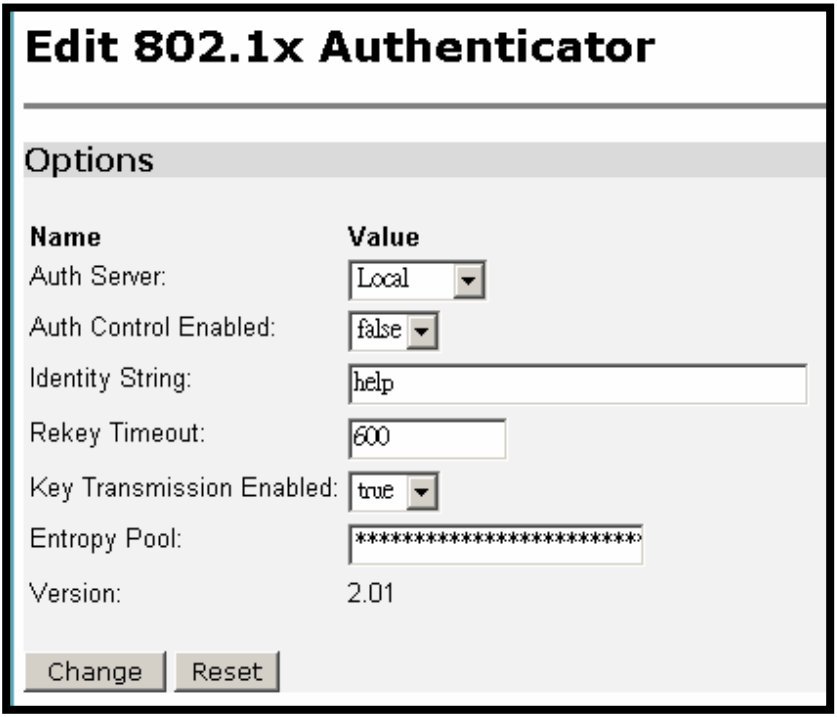
Edit Firewall Management Station.

## 2.7 Configuration 802.1x



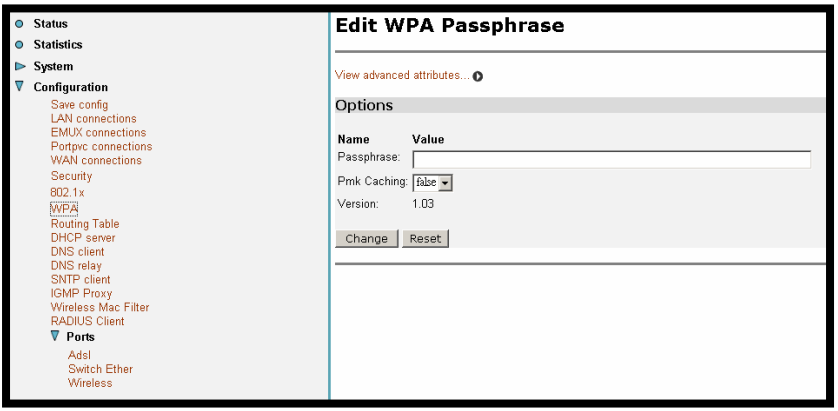

Configure IEEE 802.1x Authentication for the wireless port.

## 2.7.1 Configuration 802.1x / View advanced attributes



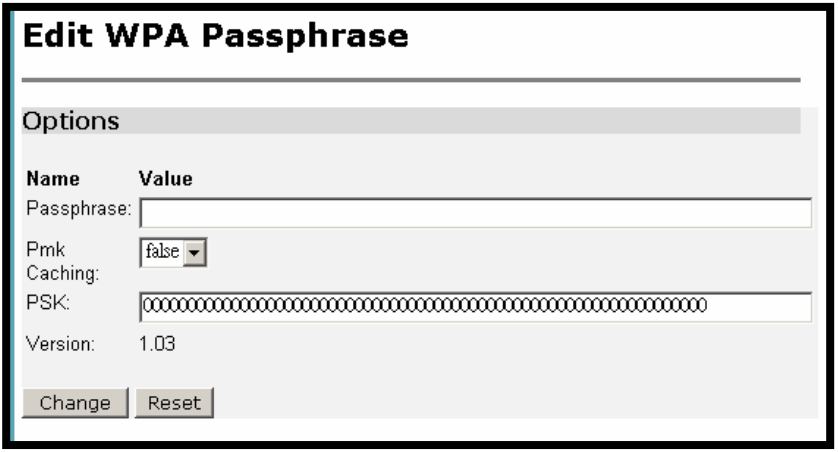

Edit 802.1x Authenticator

## 2.8 Configuration WPA




Edit WPA Passphrase

### 2.8.1 Configuration WPA

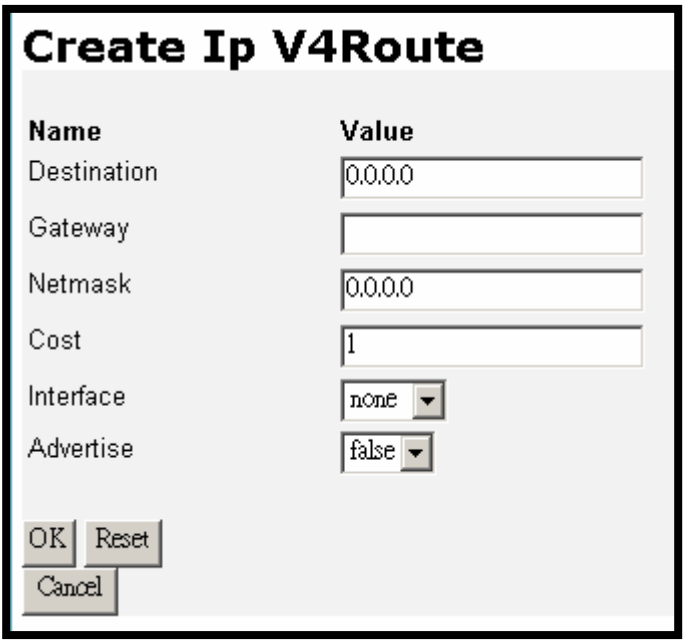



Edit WPA Passphrase

## 2.9 Edit Routes

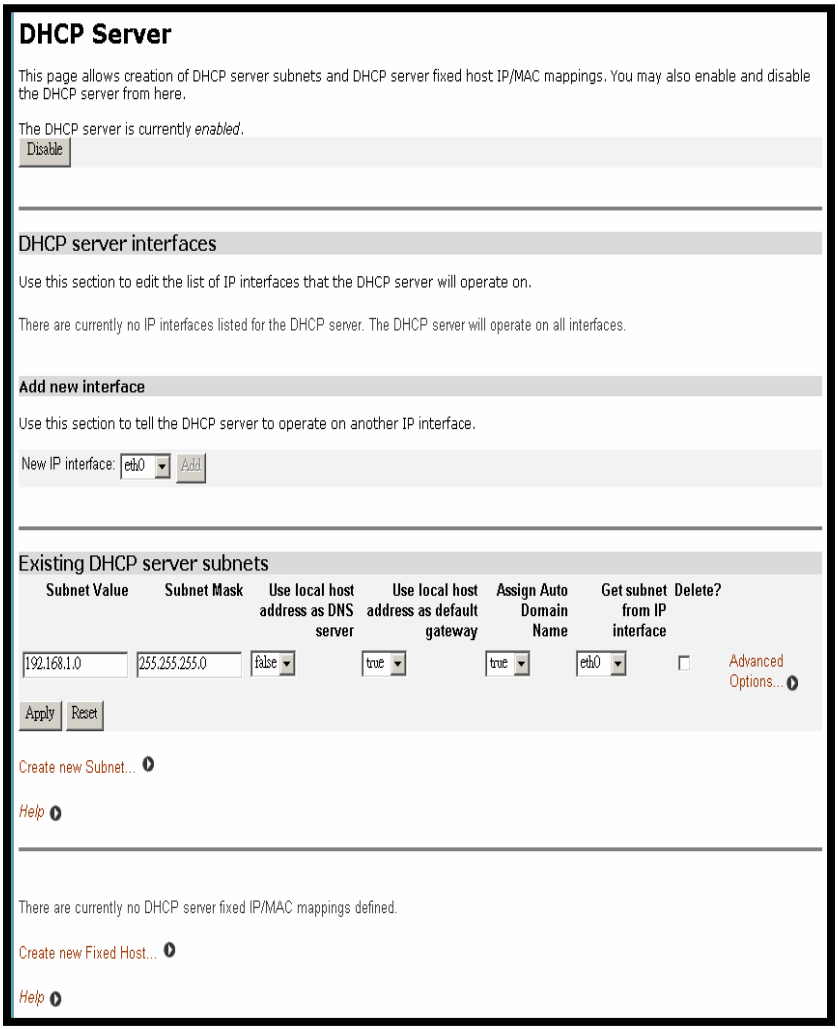
Edit currently routes or Create new Ip V4Route.

### 2.9.1 Edit Routes/ Create Ip V4Route

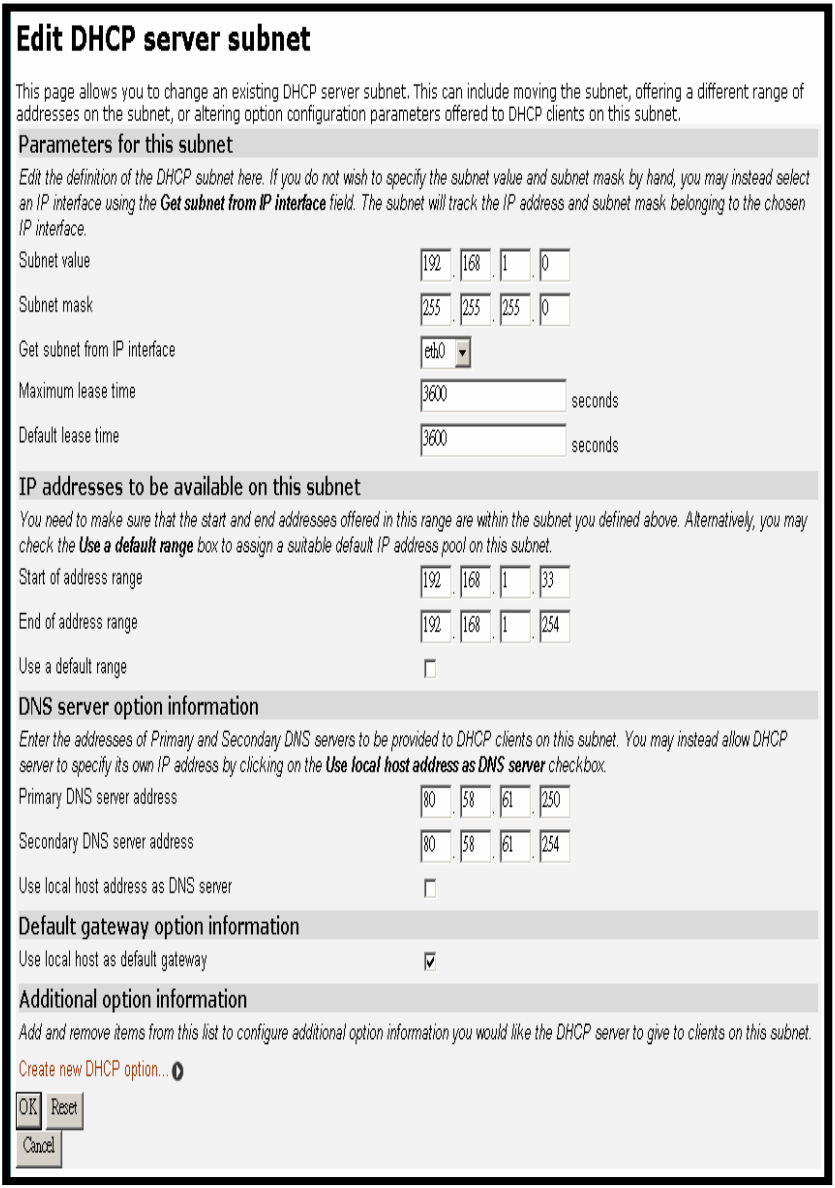


## 2.10 DHCP server

This page allows creation of DHCP server subnets and DHCP server fixed host IP/MAC mappings. You may also enable and disable the DHCP server from here.
The DHCP server is currently showed *status*.

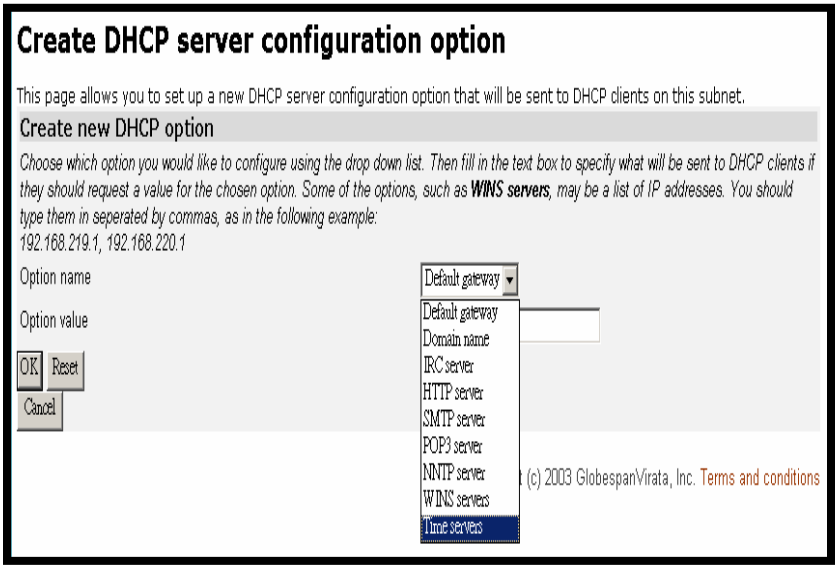

DHCP Server
This page allows creation of DHCP server subnets and DHCP server fixed host IP/MAC mappings. You may also enable and disable the DHCP server from here.
The DHCP server is currently enabled.
Disable
DHCP server interfaces
Use this section to edit the list of IP interfaces that the DHCP server will operate on.
There are currently no IP interfaces listed for the DHCP server. The DHCP server will operate on all interfaces.
Add new interface
Use this section to tell the DHCP server to operate on another IP interface.
New IP interface: eth0 Add
Existing DHCP server subnets
Subnet Value
Subnet Mask
Use local host address as DNS server
Use local host address as default gateway
Assign Auto Domain Name
Get subnet from IP interface
Delete?
192.168.1.0
255.255.255.0
false
true
true
eth0
Advanced Options...
Apply
Reset
Create new Subnet...
Help
There are currently no DHCP server fixed IP/MAC mappings defined.
Create new Fixed Host...
Help

## 2.10.1 DHCP Server/Edit DHCP server subnet


Edit DHCP server subnet
This page allows you to change an existing DHCP server subnet. This can include moving the subnet, offering a different range of addresses on the subnet, or altering option configuration parameters offered to DHCP clients on this subnet.
Parameters for this subnet
Edit the definition of the DHCP subnet here. If you do not wish to specify the subnet value and subnet mask by hand, you may instead select an IP interface using the Get subnet from IP interface field. The subnet will track the IP address and subnet mask belonging to the chosen IP interface.
Subnet value
192 . 168 . 1 . 0
Subnet mask
255 . 255 . 255 . 0
Get subnet from IP interface
eth0
Maximum lease time
3600
seconds
Default lease time
3600
seconds
IP addresses to be available on this subnet
You need to make sure that the start and end addresses offered in this range are within the subnet you defined above. Alternatively, you may check the Use a default range box to assign a suitable default IP address pool on this subnet.
Start of address range
192 . 168 . 1 . 33
End of address range
192 . 168 . 1 . 254
Use a default range
DNS server option information
Enter the addresses of Primary and Secondary DNS servers to be provided to DHCP clients on this subnet. You may instead allow DHCP server to specify its own IP address by clicking on the Use local host address as DNS server checkbox.
Primary DNS server address
80 . 58 . 61 . 250
Secondary DNS server address
80 . 58 . 61 . 254
Use local host address as DNS server
Default gateway option information
Use local host as default gateway
Additional option information
Add and remove items from this list to configure additional option information you would like the DHCP server to give to clients on this subnet.
Create new DHCP option...
OK
Reset
Cancel

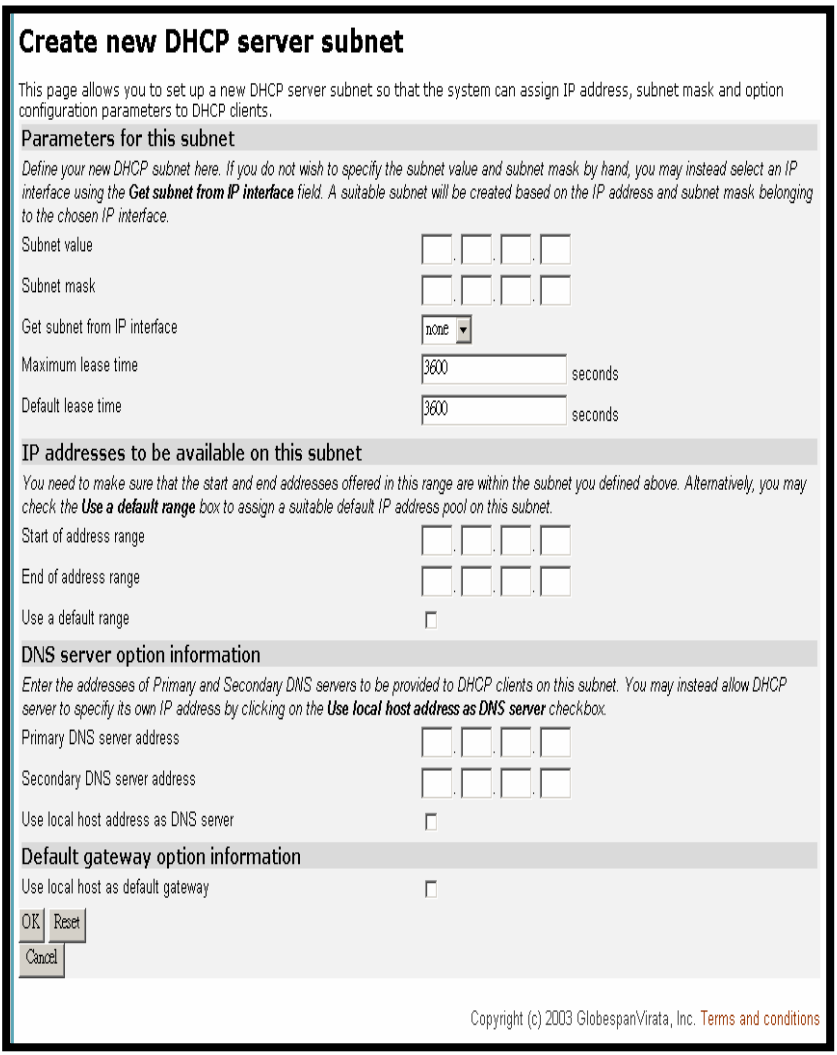
## 2.10.1 DHCP Server/Create DHCP server

This page allows you to set up a new DHCP server configuration option that will be sent to DHCP clients on this subnet.
Choose which option you would like to configure using the drop down list. Then fill in the text box to specify what will be sent to DHCP clients if they should request a value for the chosen option. Some of the options, such as WINS servers, may be a list of IP addresses. You should type them in seperated by commas, as in the following example:
192.168.219.1, 192.168.220.1


Create DHCP server configuration option
This page allows you to set up a new DHCP server configuration option that will be sent to DHCP clients on this subnet.
Create new DHCP option
Choose which option you would like to configure using the drop down list. Then fill in the text box to specify what will be sent to DHCP clients if they should request a value for the chosen option. Some of the options, such as WINS servers, may be a list of IP addresses. You should type them in seperated by commas, as in the following example:
192.168.219.1, 192.168.220.1
Option name
Default gateway
Option value
OK
Reset
Cancel
Default gateway
Domain name
IRC server
HTTP server
SMTP server
POP3 server
NNTP server
WINS servers
Time servers
(c) 2003 GlobespanVirata, Inc. Terms and conditions

## 2.10.2 DHCP Server/Create new DHCP server subnet

This page allows you to set up a new DHCP server subnet so that the system can assign IP address, subnet mask and option configuration parameters to DHCP clients.


Create new DHCP server subnet
This page allows you to set up a new DHCP server subnet so that the system can assign IP address, subnet mask and option configuration parameters to DHCP clients.
Parameters for this subnet
Define your new DHCP subnet here. If you do not wish to specify the subnet value and subnet mask by hand, you may instead select an IP interface using the Get subnet from IP interface field. A suitable subnet will be created based on the IP address and subnet mask belonging to the chosen IP interface.
Subnet value
Subnet mask
Get subnet from IP interface
none
Maximum lease time
3600
seconds
Default lease time
3600
seconds
IP addresses to be available on this subnet
You need to make sure that the start and end addresses offered in this range are within the subnet you defined above. Alternatively, you may check the Use a default range box to assign a suitable default IP address pool on this subnet.
Start of address range
End of address range
Use a default range
DNS server option information
Enter the addresses of Primary and Secondary DNS servers to be provided to DHCP clients on this subnet. You may instead allow DHCP server to specify its own IP address by clicking on the Use local host address as DNS server checkbox.
Primary DNS server address
Secondary DNS server address
Use local host address as DNS server
Default gateway option information
Use local host as default gateway
OK
Reset
Cancel
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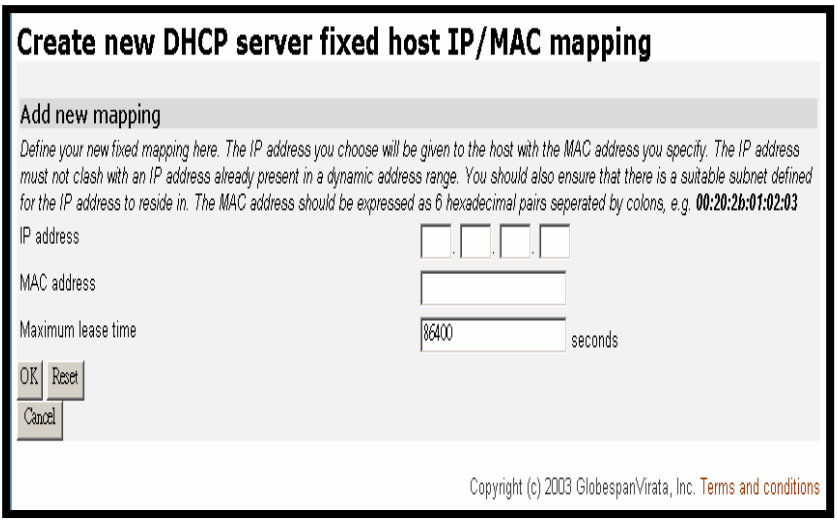
## 2.10.2 DHCP Server

/Create new DHCP server fixed host IP/MAC mapping

Add new mapping

*Define your new fixed mapping here. The IP address you choose will be given to the host with the MAC address you specify. The IP address must not clash with an IP address already present in a dynamic address range. You should also ensure that there is a suitable subnet defined for the IP address to reside in. The MAC address should be expressed as 6 hexadecimal pairs seperated by colons, e.g.* ***00:20:2b:01:02:0***


Create new DHCP server fixed host IP/MAC mapping
Add new mapping
Define your new fixed mapping here. The IP address you choose will be given to the host with the MAC address you specify. The IP address must not clash with an IP address already present in a dynamic address range. You should also ensure that there is a suitable subnet defined for the IP address to reside in. The MAC address should be expressed as 6 hexadecimal pairs seperated by colons, e.g. 00:20:2b:01:02:03
IP address
MAC address
Maximum lease time
86400
seconds
OK
Reset
Cancel
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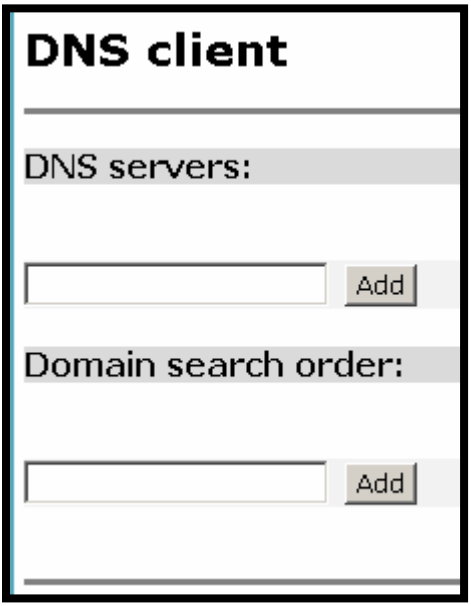
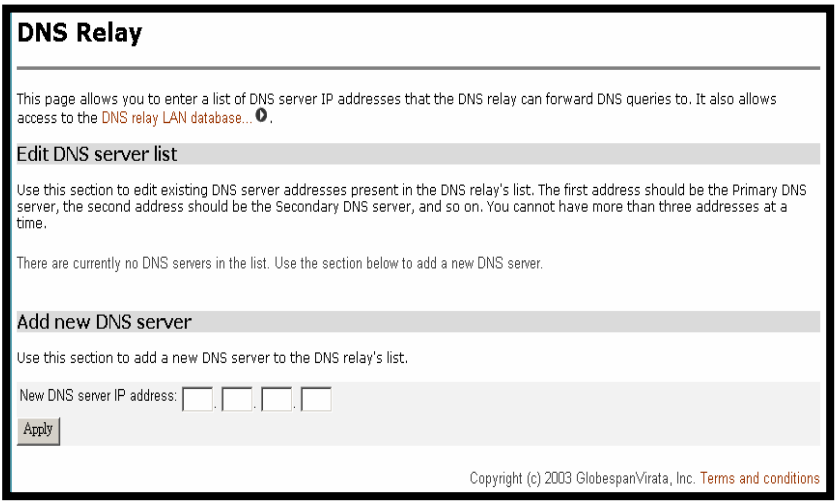
## 2.11 DNS Client




Edit DNS servers or Domain search order.

## 2.12 DNS Relay

This page allows you to enter a list of DNS server IP addresses that the DNS relay can forward DNS queries to. It also allows access to the DNS relay LAN database....
Edit DNS server list
Use this section to edit existing DNS server addresses present in the DNS relay's list. The first address should be the Primary DNS server, the second address should be the Secondary DNS server, and so on. You cannot have more than three addresses at a time.
There are currently no DNS servers in the list. Use the section below to add a new DNS server.
Add new DNS server
Use this section to add a new DNS server to the DNS relay's list.


DNS Relay
This page allows you to enter a list of DNS server IP addresses that the DNS relay can forward DNS queries to. It also allows access to the DNS relay LAN database...
Edit DNS server list
Use this section to edit existing DNS server addresses present in the DNS relay's list. The first address should be the Primary DNS server, the second address should be the Secondary DNS server, and so on. You cannot have more than three addresses at a time.
There are currently no DNS servers in the list. Use the section below to add a new DNS server.
Add new DNS server
Use this section to add a new DNS server to the DNS relay's list.
New DNS server IP address:
Apply
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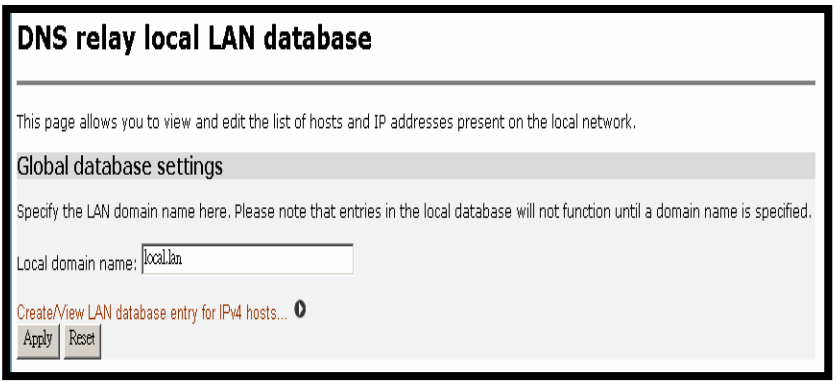
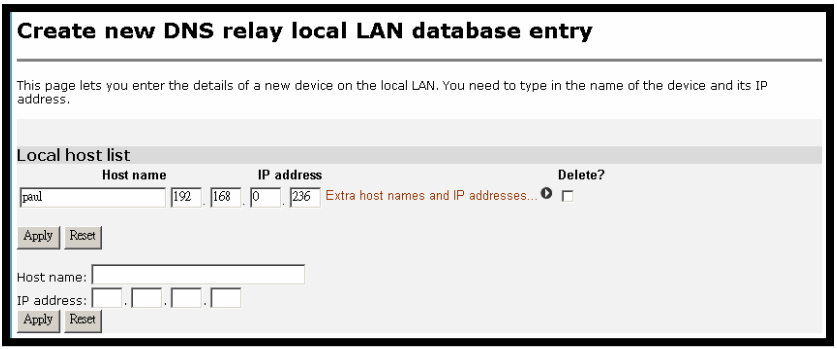
## 2.12.1 DNS Relay/DNS relay local LAN database

This page allows you to view and edit the list of hosts and IP addresses present on the local network.
Global database settings
Specify the LAN domain name here. Please note that entries in the local database will not function until a domain name is specified.


DNS relay local LAN database
This page allows you to view and edit the list of hosts and IP addresses present on the local network.
Global database settings
Specify the LAN domain name here. Please note that entries in the local database will not function until a domain name is specified.
Local domain name:
local.lan
Create/View LAN database entry for IPv4 hosts...
Apply
Reset

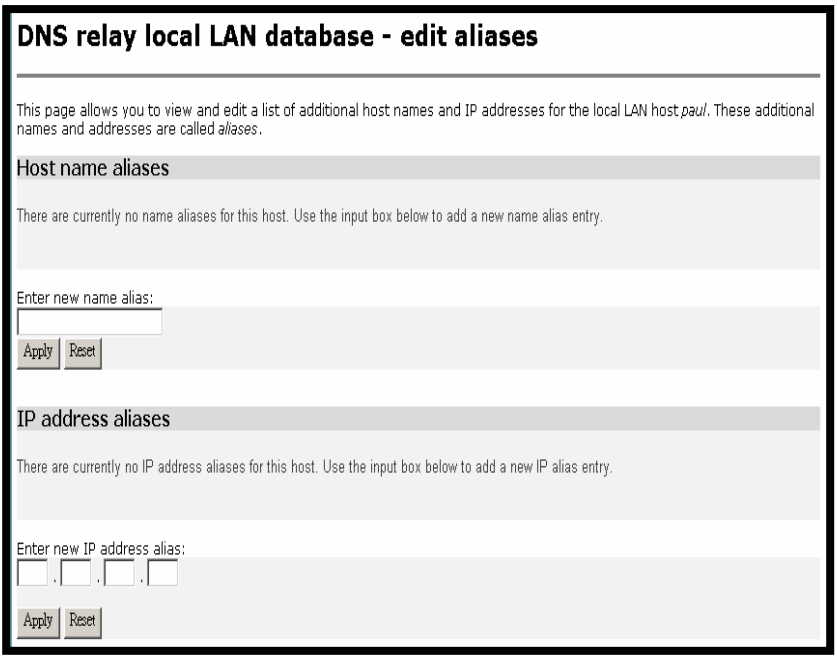
### 2.12.1.1 DNS Relay/DNS relay local LAN database /Create new DNS relay local LAN database entry

This page lets you enter the details of a new device on the local LAN. You need to type in the name of the device and its IP address.

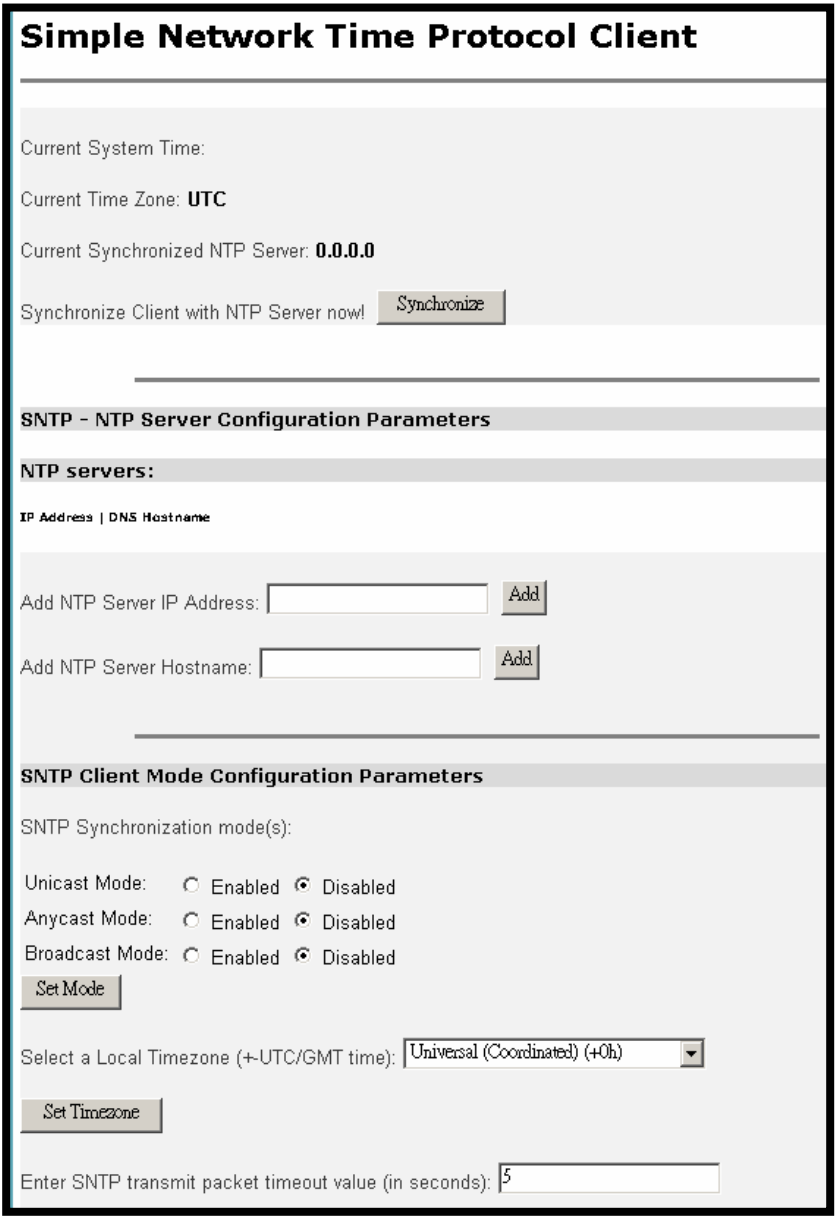

Create new DNS relay local LAN database entry
This page lets you enter the details of a new device on the local LAN. You need to type in the name of the device and its IP address.
Local host list
Host name
IP address
Delete?
paul
192 . 168 . 0 . 236
Extra host names and IP addresses...
Apply
Reset
Host name:
IP address: . . .
Apply
Reset

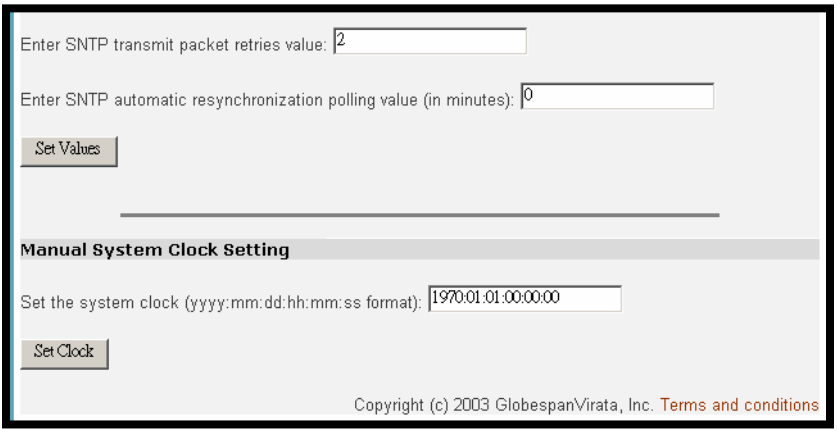
### 2.12.1.1.1 DNS Relay/DNS relay local LAN database /Create new DNS relay local LAN database entry /Extra host names and IP addresses

This page allows you to view and edit a list of additional host names and IP addresses for the local LAN host *paul*. These additional names and addresses are called *aliases*.
Host name aliases
There are currently no name aliases for this host. Use the input box below to add a new name alias entry.
IP address aliases
There are currently no IP address aliases for this host. Use the input box below to add a new IP alias entry.


DNS relay local LAN database - edit aliases
This page allows you to view and edit a list of additional host names and IP addresses for the local LAN host paul. These additional names and addresses are called aliases.
Host name aliases
There are currently no name aliases for this host. Use the input box below to add a new name alias entry.
Enter new name alias:
Apply
Reset
IP address aliases
There are currently no IP address aliases for this host. Use the input box below to add a new IP alias entry.
Enter new IP address alias:
Apply
Reset

## 2.13 SNTP client




Enter SNTP transmit packet retries value: 2
Enter SNTP automatic resynchronization polling value (in minutes): 0
Set Values
Manual System Clock Setting
Set the system clock (yyyy:mm:dd:hh:mm:ss format): 1970:01:01:00:00:00
Set Clock
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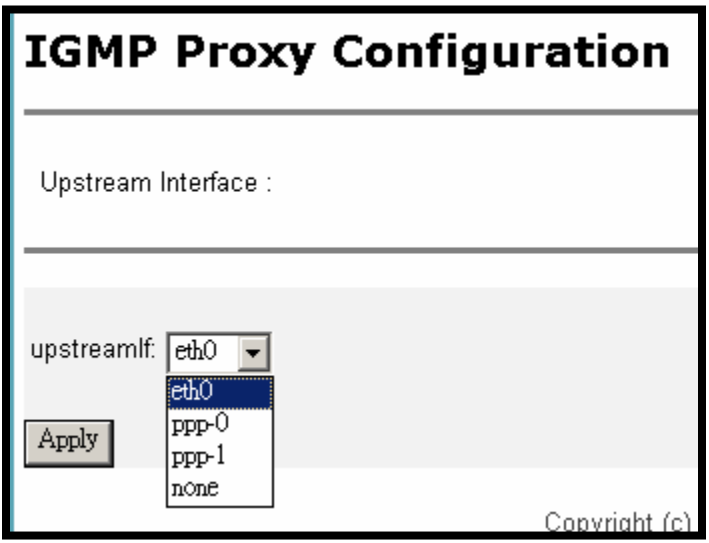
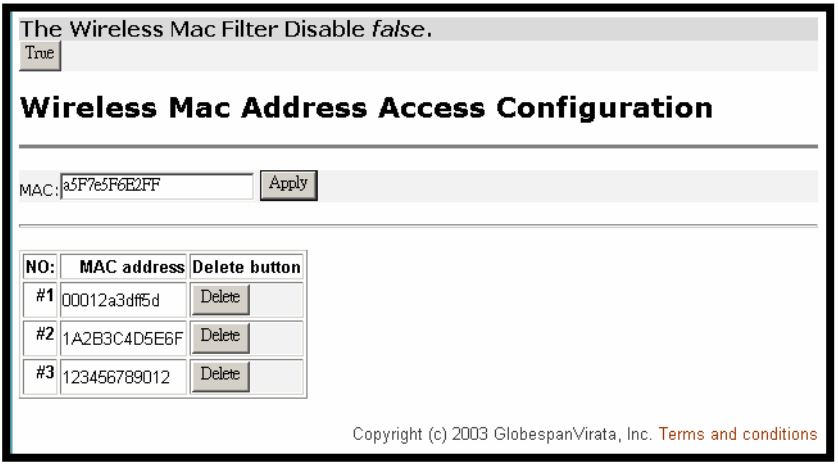
## 2.14 IGMP Proxy



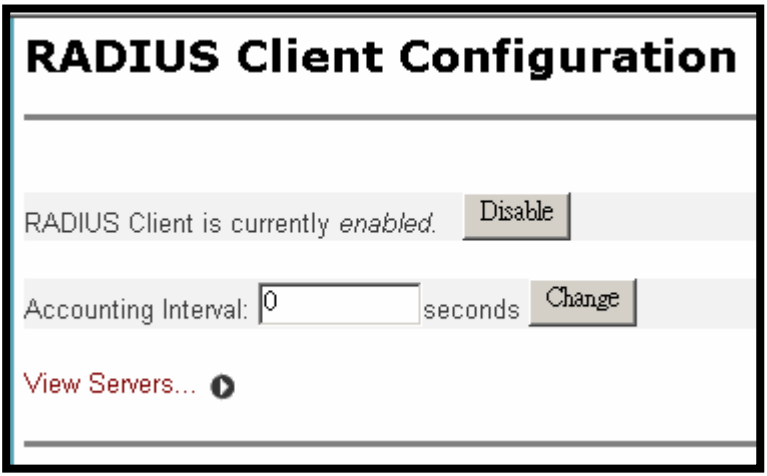

Edit Upstream Interface.

## 2.15 Wireless Mac Filter



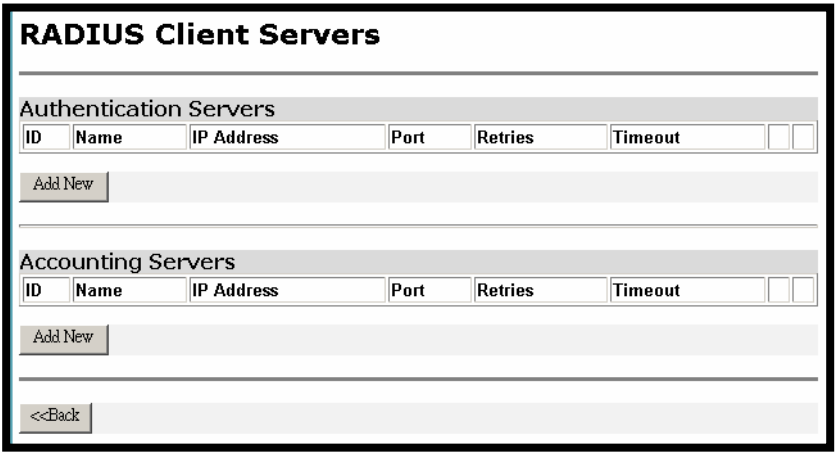

Wireless Mac Address Access Configuration

## 2.16 RADIUS Client




RADIUS Client Configuration

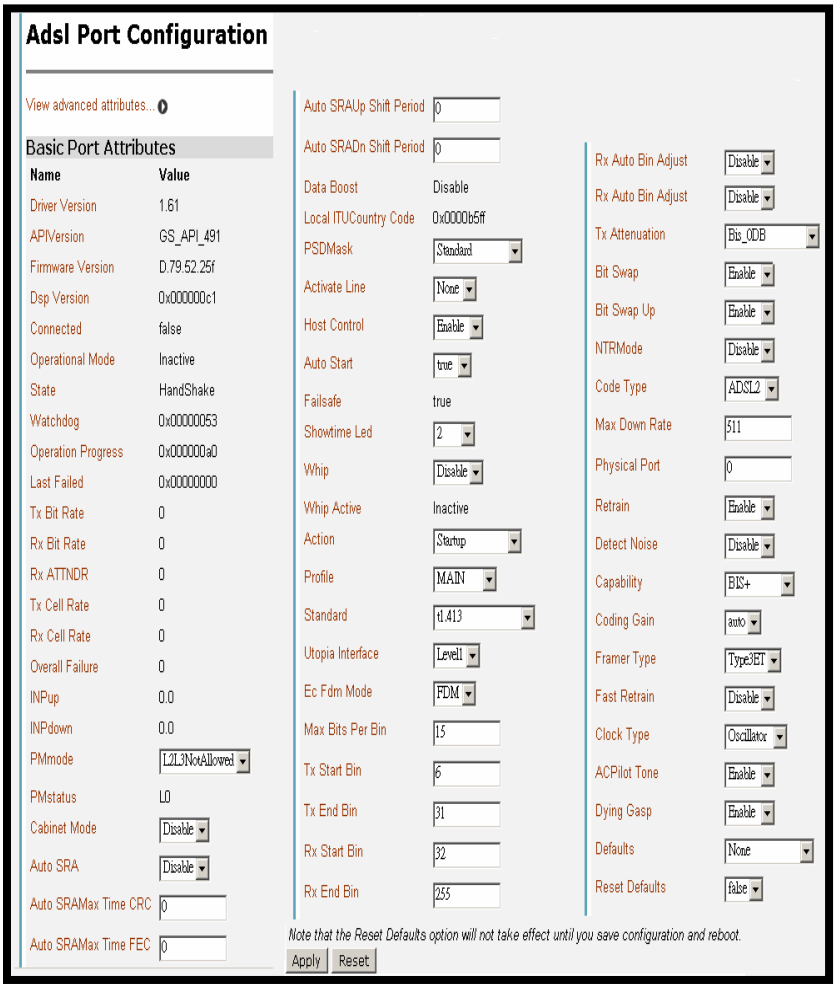
## 2.16.1 RADIUS Client/ View Service



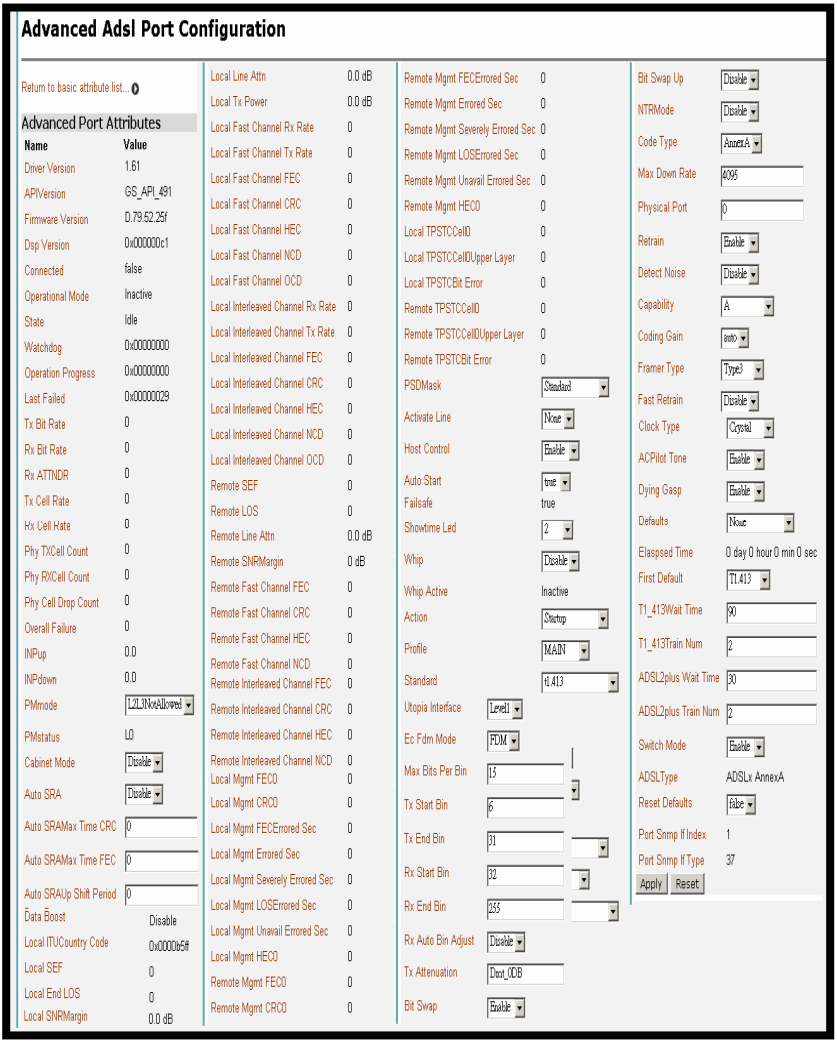

Add Authentication Servers or
Add Accounting Servers.

## 2.17.Port/ADSL

*Note that the Reset Defaults option will not take effect until you save configuration and reboot.*

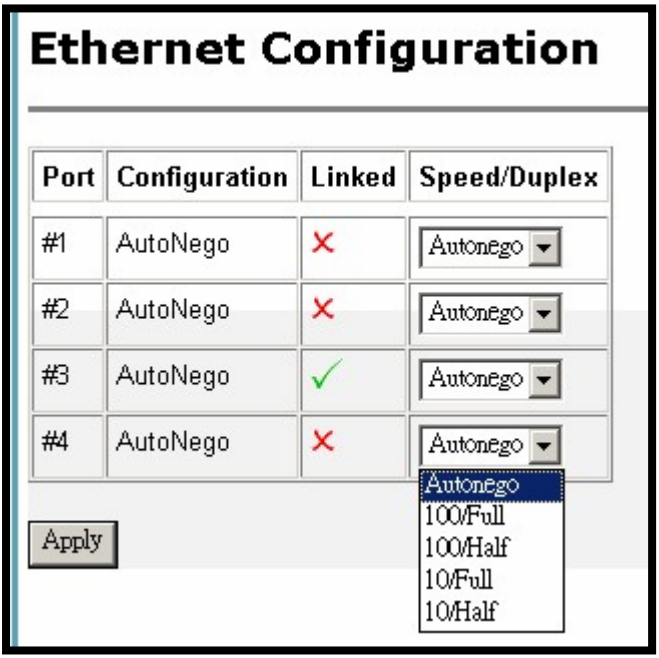


## 2.17.1.Port/ADSL/View advanced attributes




*Edit or see whole* advanced attributes.

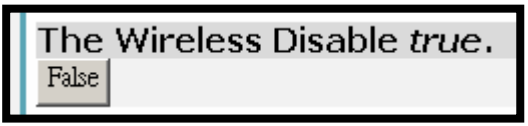
## 2.17.2 Port/ Switch Ether




See Ethernet Configuration status.

## 2.17.3 Port/ WireLess

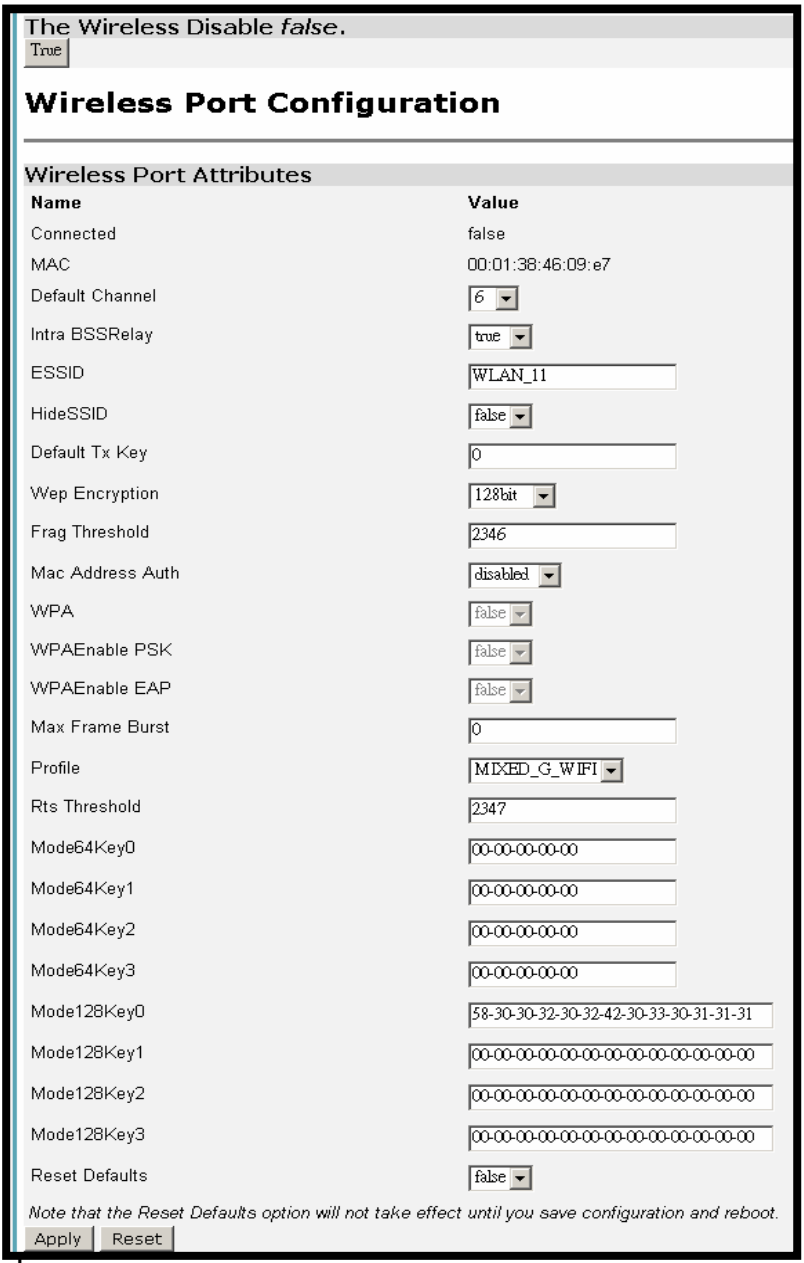
The Wireless Disable true.




## 2.17.3 Port/ WireLess

*Note that the Reset Defaults option will not take effect until you save configuration and reboot.*

The Wireless Disable false.




--- The End ---